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ABSTRACT

The 29 papers in this collection were presented at 9 conference workshops: "Inset Maps and Proposals for Their Description" (V. Kusov); "The Utilization of the Old Maps in Modern Researches" (H. Melnikova); (3) "New Series of Maps for Higher Schools: Their Role in the Cartographic Provision for the Higher Education" (O. Yevteyev); "The Contribution of Maps to the Development of Society" (Y. P. Arzhanov); "The Indivisibility of Art Librarianship" (P. Pacey); "International Exchange of Art Publications: Some Points for Discussion" (J. M. Shaw); "Materials for the Study of Russian/Soviet Art and Architecture: Problems of Selection, Acquisition, and Collection Development for Research Libraries, in Historical Perspective" (E. Kasinec, R. H. Davis; "The National Art Library and the USSR: Connections and Collections" (J. van der Wateren); "Collections, Scientific Activities, Literature Acquisition in the Library of the State Hermitage" (E. I. Makarova); "Tretyakov Gallery Scientific Library Collection" (A. Bolotova); "From Keeping to Knowledge. Theatre Library in Changing World" (L. V. Krotkova); "Fine Arts Data and Data Banks in the USSR" (D. G. Pertsev); "Automated Data Bank on Culture and Arts" (L. Tikhonova); "Young Adults and Libraries--A Troubled Relationship?" (I. Glashoff); "The Role of Reading in the Life of Contemporary Children and Teenagers" (A. Lebedeva); "Factors Which Contribute to Reading Motivation by Middle Grade Students in the United States" (S.

Fitzgibbons); "How To Encourage Children To Read Foreign Literature?" (O. Miaotz); "We Have Read Different Tales (on value models in children's reading)" (M. Dubrovskaya); "Children's Literature Documentation Centres in the USSR: The Present-Day Situation and the Trends of Development" (Y. Prosalkova); "International Interlending of Materials in Alternate Formats: Planning and Executing a Worldwide Project" (E. Massis); "Conversion Technology of Multilingual Card Catalogues of Lenin State Library in Machine Readable Form with the Use of Scanning Devices" (A. Vostrikov, Y. Fenin); "The Application of Life Cycle Costing in Libraries: A Case Study Based on Acquisition and Retention of Library Materials in the British Library" (A. Stephens); "Library Use of Cost Analysis and Cost Recovery" (J. Goforth, M.E.D. Koenig); and "Management Education and Training for Librarians in Scotland" (I. M. Johnson, and others). (MAB)

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57th IFLA GENERAL CONFERENCE MOSCOW, USSR 18–24 AUGUST 1991

BOOKLET 9
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105-GEO-3(WS)-E

Inset Maps and Proposals for their Description

V. Kusov
assistant professor, cartographical chair of the geographical department, Moscow university, USSR

Contemporary methods of transferring information on maps published in books and periodicals are far from perfection. The following fact graphically testifies to the specific attitude of the book industry to reports about the emergence of maps as a component of other types of publications.

In 1848 a brilliant work by Lavrenty Zagoskin under the title "The Pedestrian Register of a Part of Russian Possessions in America in 1842, 1843 and 1844 with Mercator Map Engraved on Copper" appeared in St. Petersburg (K.Kray's Printing Office). This work was awarded the Demidov Prize in competition with the famous mathematician P. Chebyshev. The author of this work who was a naval officer by profession denoted by the marine term "register" the major part of the multiaspect task of cognizing the new theory — its mapping. The seafarer accomplished his task succesfully on dry land too and reflected in the title of the book account some important aspects of the document obtained. Zagoskin compiled the map of Alaska in Mercator projection and distributed it in many copies by the metal engraving method, but not by the method of lithography, although the latter was widely used in Russian hydrography since 1820.

In 108 years this book by Zagoskin was reprinted in Moscow Geografgiz Publishing Hous with the supplement containing his several short articles and with a solid scientific commentary. In 1956 the same work by Zagoskin came off the press under a different title: "Travels and Surveys by Lietenant Lavrenty Zagoskin in Russian America in 1842-1844". Information on the main achievement of his field surveys for three years — the creation of the map of Alaska — vanished from the title. Just several last signs of the bibliographical description — 454 p. with ill. and maps; 9 sign. of ill., 1 ind. sign. — speak about the continuation of the existence of this outstanding cartographic work. Moreover, on p. 399 of the 1956 edition in the section "Bibliography of Zagoskin's Works" the title of his main work is afain reduced — "The Pedestrian Register..." Data on the map are removed from the title and only the supplement informs readership about its existence. I shall not consider this fact of an arbitrary attitude of publishers to the author's text, stressing only the widespread indifferent attitude to any cartographic works, including unique monuments.

For instance, the authoritative modern reference-book [1], p. 221 says about the famous edition of the Cyrillic script; "Paterik Pechersky. Kiev, Printing Office of Pechersky Lavra (Monastery), 1661 314 pp. +1 inset, engraved plan of caves". Of course, it is incorrect to call the work of this country's culture which had in its epoch the corresponding name in the mother tongue by the foreign term "plan". It is more correct to call this country's maps of the 17th century by the term "drawing" and not by the term "plan". However, we use the term "computer" for denoting the "Russian counting-frame". In this case in 1661 when in the Kiev edition of the "Paterik" (a book about the life and sermons of Christian monks) the first printed cartographic work appeared in the Russian language, its original title "the image" should have been transferred into the bibliographic description.

The extreme scarcity of information in bibliographic records of books concerning maps in them (and sometimes these maps are outstanding cartographic works) is typical of publications in any languages. For example, the book by J.Franklin to which the map of Alaska is attached (it was also used by Zagoskin) does not contain positive information in its bibliographical description: J.Franklin. Narrative of the Second Expedition to the Shores of the Polar Sea in the Years 1825-1827, London" J.Murray, 1828. XXIV, 320, CLVIIp, with ill., 37 sign., ill.; maps.

By the last term "maps" of the above-given bibliographical description the outstanding achievement of the famous British polar explorer John Franklin is meant amidst several cartographic images. A considerable part of the northern coast of Alaska due to this work of his was for the first time ever put on the map, many geographical objects were given their names. For instance, by the right of the first discoverer Franclin named one of the mountain chains of Alaska after Nikolai Petrovich Rumyantsev, the founder of the library which is now the main state library of the USSR. Nevertheless, toponyms from inset maps are usually not included in the reference matter even in solid editions. For instance, in the above-mentioned work by Zagoskin (the edition of 1956) the "Rumyantsev Range" shown on the map is absent in the index of toponyms.

Can a researcher understand something from data of the type "+1 sign. of maps" without special surveys? For example, in the book: E.K.Gofman. The Northern Urals and the Coastal Range Pai-Khoi. Vol. 2. — St. Petersburg: Printing Office of the Acad. of Sc., 1956, 376 pp. + 2 sign. of maps.

In this work "+ 2 sign. of maps" implies the outstanding achievements of the first expedition of the just established Russian Geographical Society — the map with the exact indication of the relief of the Northern Urals given for the first time. Although formally there are "Rules of Compiling Bibliographical Descriptions" [2] according to which it is necessary to give relevant information ("If books are accompanied with a gramophone record, a map, a poster or other material which differs from the book materials, as regards the quantitative characteristic it is necessary to give its brief characreristic in compliance with the rules established for this type" [2], p. 234), everything so far remains as it was.

Naturally enthusiasts of map bibliography have repeatedly made attempts to fill somehow the information vacuum about maps inside the ocean of books. Apparently the first significant step on this road was taken by the American Geographical Society which carried out the publication of the enormous ten-volume edition "Index" in 1968 [3]. The publication of this "Index" which contains information on 150,000 inset maps is am event of paramount importance. This was fully understood also by its authors when they pointed out in the Introduction: "...Society is proud to present this publication to further geographical Knowledge". Apparently the publication of this ten-volume edition influenced also the staff of the Cartography Department of the Lenin State Library who tried during several years on their own initiative to ensure regular information on cartographic works among new book acquisitions. For about five years (1970-1975) the Department succeeded in collecting information about roughly 8,000 inset maps and in creating the corresponding card file on the thematic principle. Then for some reasons this valuable initiative did not get support and ceased to exist. Despite individual insignificant drawbacks of the ten-volume edition mentioned by the leaders of map bibliography [4], new capital publications of a similar type have not yet come off the press.

A appreciable contribution to information on maps which appear inside periodacals has been made by the staff of USSR Academy of Sciences' All-Union Institute of Scientifical and Technical Information (Russian abbreviation VINITI). For more than 20 years the reference journal "Geografiya" (Geography) regulary published in the section "Cartography" a "list of Text Maps in Articles" (in individual cases maps in books and bulletins) reflected in the cumulated volume "Geography". Each month the journal gave information on 300-400 maps — they included physico-geographical and socio-economic maps (for 30 thematic positions). Despite the brevity of information on published maps (which was benevolently criticized in [5]) — only the thematic heading with a toponym (of the type: "The density of orang-utangs in the Borneo region" or "Icings on the rivers of Eastern Siberia"), during the last few year the "List of Text Maps" in the reference journal has ceased its existence. That's why information, for instance, about the map "Territory of Contemporary Moscow in 1680" which came off press as a part of the Year-Book "On the Dry Land and on the Sea" (1989) will not reach the bluk of readers.

Opposing the term "text maps" which is unsuitable in our opinion, it is necessary to organize with maximum promptness regular infirmation on the appearance of inset maps. The brilliant monument of this country's written language of the 16th century — "The Book for a Large Drawing" [6] is an example of a "text map" — in the form of the text. If a map is published on a separate sheet, this is a "map", but if it is put in the book as an inset, it does not become a different "text" map. In 1990 the Lenin State Library prepared the renewed version of "The Rules of Compiling the Bibliographical Description" [7]. In describing cartographic works (7, part three) which are components of books or periodicals it is supposed to give information on the map and on the book where it is placed with equal respect in compliance with the State Standard. 7.1 and 7.18. Can one imagine that describing the inset map bibliographers (they are the author of the correponding section of [7]) would present the following: "the map under a definite heading + 258 pp. of the book text" ?! Why then does the bibliographer use the formula: "the book (title) + 1 sh. of maps"?

We belive that the bibliographical description of inset maps should consist of four positions: title, scale, size and note. Sometimes the point "note" will contain the largest amount of information. Let us give by way of example the bibliographical descriptions of four above-mentioned works according to these proposals:

1. Zagoskin L.A. Pedestrian Register of the Part of Russian possessions in America in 1842, 1843 and 1844 with the Mercator Map Which Is Copper-Engraved. St. Petersburg: K.Kray's Print. Office. — 348 pp., ill.

   "The Map of the Part of Russian Possessions in America", med. scale 1:3.2 mil., 50 x 46 cm, reflects the degree of studying Alaska for 1840s, the blank space makes up about 80 % of the internal area.

2. Paterik Pechersky. Kiev: Print. Office of the Pechersky Lavra, 1661. — 314 sheets, 2 insets, both are 37 x 30 cm in size, maps are on the scale about 1:300, "the image of Rev. Antony's cave", "the image of Rev. Feodosy's cave", the first printed maps in Russian with the indication of the linear scale and orientation.

3. Gofman E.K. The Northern Urals and the Coastal Range Pai-Khoi. The survey of the expedition organized by the Imperial Russian Geographical Society in 1847, 1848 and 1850. St. Petersburg: Print. Office of the Acad. of Sc., 1856. — 376 pp., insets on 2 sheets 57 x 77 cm, "The Map of the Northern Urals and the Coastal Range Pai-Khoi", scale about 1:1.1 mil., the first map of the northern part of the Urals, based on the instrumental survey with the natched relief.

4. Kusov V.S. Lands of Moscow Three Centuries Ago. In : On the Dry Land and at the Sea. 1989, Moscow, pp. 485-489; the map "Territory of Contemporary Moscow on 1680" in-plano pp. 486/487, scale about 1: 160,000, 25 x20 cm, the first map-reconstruction of the administrative division of this territory in the 17th century, of types of 155 settlements and their toponyms. If bibliographical descriptions of maps are compiled by the authors of maps themselves according to the form recommended her and their permanent publication is carried out through *Knizhnaya Letopis*, the effectiveness of these data will for certain be maximal.

References

1. Catalogue of Books of the Cyrillic Script of the 15th-17th Centurie of the Scientific Library of Moscow University. Moscow: Moscow University Press, 1980, 360 pp.
2. The Rules of Compiling the Bibliographical Description. Part One. Books and Serial Publications. Moscow, Kniga Publishers, 1986, 528 pp.
3. Index to Maps in Books and Periodocals. Vol. 1-10. Boston: Hall, 1968.
4. Utin G.N.Sources of Reference-Bibliographical Information on Cartographic Works. Izvestia (Proceedings) of the All-Union Geographical Society, 1974, no. 4, pp. 329-334.
5. Pokshishevsky V.V. On the Use of Text Maps in Publications Abstracted in the Reference Journal *Geografiya* // Izv. (Proc.) of the All-Union Geographical Society, 1973, No. 5, pp. 476-477.
6. The Book for the Great Drawing. Moscow-Leningrad: USSR Academy of Sciences Publishers, 1950, 229 pp.
7. The Rules of Compiling the Bibliographical Description. Part Third. Cartographical Works. Moscow, Lenin State Library, 1990, 280 pp.

Thecommunication is accompanied by the demonstration of slides.

The Utilization of the Old Maps in Modern Researches

Helen Melnikova
Senior Researcher, The All-union Research Institute of Documentation and Archives, USSR

The map is a unique documentary written source. It contains broad information of spatial aspects of historical process in a highly compact and clear form. The use of modern long-term cartographic information has been stirred up in the USSR lately.

In the present the old times maps are widely used in different branches of economy, science and social life, including the evaluation of natural resources, their development and exploitation, the organization of the use of land and forests and land-improvement, the creation of environmental protection system; architecture, industrial and civil construction, community (municipial) economy; education, history, culture and public life.

In agriculture the old maps are used for territorial land scheming. For example, the General scheme of land-using system of the USSR till 2000.

The definition of the duration of a territorial land development gives a certain knowledge of the soil spoil and exhausion degree. The study of land-structure at different historic periods favours the optimum choice of its variants at the present.

Mastering in agricultural system alterations gives some clue to comprehension of corelations between agriculture and other branches of public production. Large-scale or topographic land using and hypsometric maps and territorial plane, soil maps, land-surveying plans, swamp and pasture maps, statistic maps with the profit and crop capacity data and others can be used for these stidies.

The information of the old maps is valuable for forestry too, the main goal of which is the organization of rational nature use and preservation of forests. One of the chief forest using measures is the development of the economy managing projects for the long-term period.

The old maps are indispensable for these purposes, as they give an idea of the dynamics of the forest-covered territory developments and their contents evolution. They may serve as a base for forest-use scheming. They are a source for knowledge of pure nature in the past.

As forest resources have been highly exploited lately, these maps may be also broadly used as basical information of unspoiled nature in the past times. The old maps can help when forest recovering measures are being undertaked, as they include appropriate data. If these arrangements are made for small territories then plans and maps of a certain afforestation are used. If some large regions or the country in general is to be schemed then general land- surveying plans and military surveying maps are to be addressed to.

The old maps are broadly employed in melioration and water industry as they inform of the former water supply systems and their changes since. The researchers make use of the old hydrographic materials: river plans and sea charts, maps and atlases and geographic maps as well.

The application of the old maps in geology and mineral prospecting is connected with the reexploitation of mineral resource fields, especially when certain types of them are being drained. The geological organizations take for their researches the old maps with long-left mine working known as exhausted. Nowadays they may be used as raw materials if some modern technologies are applied to. For this purpose geological (geognostical), and petrographical maps, mine maps and atlases; resource fields maps, plans of the reconnaissance group routs and others may be usefull.

The old maps are at service at the level of planning and projecting in constructing industry, architecture and municipial economy. Architects and town-planners have been exploiting the retrospective information for a long time. They turn their attention to the old maps while working out the long-term general schemes of the state and regional development; studying the peculiarities of town and village planning; reconstructing and equipping with services and utilities urban and rural territories; marking restricted areas, and also optimizing and distributing capital investments; town-projectors define the raville net growth rate according to the old maps. When architects registrate and certificate the relicts of the past, study different architectural tendencies, the life of famous architects, make use of the large-scale plans, city-plans and the plans of some streets, fortress, abbeys etc.

The old maps are of the great importance in hydrometeorology, environmental protection, rational use and resource reproduction, ecological forecasting. The utilization of the old materials simulteniously with thw remote sensing and land control data makes possible the long-term (retrospective) monitoring that is surveying and control of environmental conditios in general and its elements in particular.

The problems of environmental protection, its rational utilization and resource reproduction providing include scientific, economic, political and social aspects. Maps from different spheres can be used to solve these problems.

The old maps are employed in national park service and hunting industry to detect natural relicts, parks and reservs.

The old maps are employed in the traditional historical studies, such as the history of geographic discoveries, the development of military operations, opening up new lands etc. Historicians, archeologists, ethnographers have worked out the methods of historical and geographical, historical and social reconstructions to form and check historical conceptions and even reveal some unknown facts. The whole spectrum of geographical and subject maps are used for the studies like these.

The state and inner boundaries are established according to the general and special maps of Russia, the maps of borderlands, Merchator's maps and navigations charts.

The old maps are broadly used in the social domaine for educational purposes to form students historical and cultural background, and also as a documentary base for the development of the contemporary maps to show the evolution of map-creating during the latest three centuries.

The old maps are employed in a number of international programms, such as geo-and-biospherical programm "Man and Biosphere". It studies the impact of different types of land — using and management practice on the components of the environment.

The development of the map as a modell of the reality and the growth of social demand for cartographic information will lead to the emergence of the new applications of the old maps.

New Series of Maps for Higher Schools: their role in the the cartographic provision for the higher education.

Oleg Yevteyev
Assistant Professor, Geographical Faculty, Moscow University

The new series of maps for higher schools in the USSR are distinguished by the systems approach as regards their themes, choice of territorial level of mapping and selection of methods of cartographic impression and concordance.

The adoption of the system approach for university mapping is based on the progress in geography and in other sciences determining the content of maps and on development of principles of geographic cartography as regards the methods of map compilation and concordance in atlases and in series of interrelated maps.

The need for such approach is also determined by the educational motives to provide maximum perception effect through system presentation of information to help the students better learn spatial regularities of phenomena.

Here we come to the principal approach to the representation of information on the Earth and society in the framework of geosystems: natural and socioeconomic ones. This account for the necessity to have very wide thematic spectrum of maps for higher schools, embracing all major aspects of the nature and society. The systemity of maps is increased by the integration mapping (for examples in maps of landscapes and of natural regionalization as well as in maps of general economy etc.).

The system approach is reflected in the territorial aspect as well through the choice of spatial levels of mapping in conformity to the general likes of the hierarchy of geosystems such as global, subglobal and regional. Accordingly, the maps for higher schools are subdivided into territorial series of maps: those of the world (basic scale 1:15 000 000), those of the USSR (scale 1:4 000 000 and 1:8 000 000), those of the continents (scale 1:6 000 000), those of selected regions of the world (scales 1:3 000 000— 1:1 000 000) and those of the regions of the USSR (scales 1:2 000 000— 1:1 000 000).

The concordance of maps is realised in different aspects. The first aspect is the contents whereas the themes are interrelated, e.g. a groups of maps of relief features of the world: the hypsometric, orographic and geomorphological ones.

The second aspect is methodological one, realised in a number of directions: the methods of cartographic presentation, the legends of maps, territorial units of mapping, the outlines of the objects, the directions and the degree of generalization, the methods of cartographic design.

The maps for higher schools are distinguished by deep scientific elaboration of the contents. They are created by highly qualified teams of specialists of the Moscow and other universities and scientific institutions of the USSR. Many maps for higher schools are pionneer works — both in terms of content and methods of mapping (for examples the world land use map, the cryolithological map of the USSR, the map of river bed processes of the USSR, the map of the nature protection of the USSR, the map of agricultural regionalization of the USSR, etc.

Original contents can also be noted in such maps as the geomorphological maps of the world and of the USSR, the maps of vegetation of the USSR and of European part of this country, the general economic map of the East European countries and so on.

The experience gained in production and use of maps for higher schools make it possible to state confidently that they are important both from the educational standpoint and the scientific and methodological ones.

Conceptually, the value of maps is determined by the fact that they are created on the basic of advanced scientific concepts with respect to the structure, interrelationships and regularities of distribution of phenomena in question.

The information qualities of those maps are accounted for by the volume of and updated information about the mapped phenomena and also by the comparatively high level of detaility of cartographic presentation. The methodological value of the maps is accounted by the large spectrum of their themes for different territorial levels and the variety of methods of mapping.

The above conceptual and information qualities of maps for higher schools open up large possibilities for their use not only for educational purposes but for scientific research as well.

The methodological role of maps for higher schools is accounted for their educational functions, which is enhanced by the above noted thematical, territorial and methodological variety of such maps. This role is manifested in two main aspects: in geography and in other sciences of nature and society on the one hand, and in cartography on the other hand. In the first sense, these maps reflect the modern scientific conceptions and a large volume of modern information in the form of well organized and well-perceived entities. One must not forget the cartographic method of cognition and the use of maps.

In the cartographic sense, the methodological value of maps for higher schools is connected mostly with the learning and training of the methods of maps elaboration; of the ways and processes of generalization, of the methods of systems concordance of maps both in term of the contents and methods applied.

From the standpoint of the contents, university maps open up opprtunities for the studying subjects of mapping such as geosystems and their elements — from visual perception and direct description of the pecularities and regularities of their distributions and interrelations to a deeper analysis of such subjects and, finally, to the obtaining of integrated characteristics and notions and to the elaborations of some derivative maps, etc.

The methodological possibilities of the maps for higher schools are explained, besides their above qualities, also by their demonstrative and perceptional traits.

An Analysis of Computer Map—Making and Grahpic Design

Alexander Koshkaryov
Senior Researcher, Institute of geography, USSR Academy of Sciences
and
Ludmila Zinchuk
Chief Librarian, Map Division, Lenin State Library, USSR

Preface

During its twenty-five year development automated cartography has accumulated a mass of experience concerning methods and practical realizing of computer topographic and thematic map-making. The most concentrated reflection of this experience is a number of computer maps, atlases and map sets, which have been published during this time, and which can indicate degree of automated cartography development in any period, in any country, in some branch of thematic map-making. This report has for an object to analyse features of this production in the field of data sources, hardware and software means of data-processing, mashine-graphic means, the manner of cartographical representation and map design. The analysis is based on the catalogue prepared for publication in 1990 by the USSR Academy of Sciences Institute of Geography in cooperation with the Map Division of the Lenin State Library (The automated cartography production: A catalogue of computer maps and atlases / L.N.Zinchook, A.V.Koshkariov .— Moscow, 1991 .— 108 p.). The catalogue describes 48 issues stored in Lenin State Library and, partially in the Institute of Geography, published during 30 years. The catalogue is organized by continents and countries, contains to be easy-to-use four auxiliary indices: Geographic Index, Atlas Title Index, Personal Names Index, Corporate Bodies Index.

Computer maps and atlases features

Source material types. One of the most remarkable general features of automated cartography production is using of a large volume of well structured ranged data bases. To be analize its information supply of special interest are: primary thematic and locality source material characteristics, forms of their "existence" (representation, physical being), features of interaction of data-keepers and map-makers, system of data collection and ordering in according to the authors' conceptual aims. There are three source material data types:

1) Population census data, on which have been based a wide variety of social-economic, economic and demographic atlases (14-16, 21-23, 29, 35, 39, 41, 43) as well as federal and ministry administration statistics, similar by collection modes and representation forms, for example, mortality (12,13), crop capacity (4), selected tests (16).

2) Geological, geomorphological, geophysical and geochemical system collection data. They are: geochemical testing network (7, 11, 20), national and international systems of gravity anomaly data collection (9, 30, 32, 37, 46) and magnetic anomaly data (31, 33), altimetric (33, 42), aeromagnetic (8), radiolocation (42), naval hydro-acoustic systems (28).

3) hydroclimatic data of regular meteorological and weather observations and their different combinations (1, 2), oceanographic and oceanological information data (3, 46) similar by obtained mode, processing methods and representation form. Secondary *cartographic* material sources consist small part of thematic data.

Special group is formed by inventory-information atlases of summary data (34, 36), although the same characteristics — availability, reliability, belonging, data density — constitute custom auxiliary teams to be prefer a level of factual data, as a rule various by types, kinds, confidence, completeness, it means — traditional set of drawbacks of a lot mass data collection in heterogeneous and instability technical processing environment.

Source material data can be divided in two groups: *analogical* and *digital.* The first group consists of derivative and generalized sources concerning in form of primary statistics review, tabs, catalogues, lists, cadastres. Digital source materials present the same data in machine-readable (punch-, tape, video) form not to be digitated.

A really practice has a large volume of special modes of data transformation into unified digital environment. They are:

1) manual tabulation of published data from ministry statistic reports (6, 17, 25, 35);

2) retrieval and extracting of necessary data from existing digital data sets (12-14, 24, 26, 29, 30, 32, 37, 39, 41-43, 46);

3) creation of special digital data sets (databases and databanks) of general purpose (non specific cartographical) but not only for map generation (7 - 11, 20, 40);

4) making of special databases and databanks aimed only to be used for the content of concrete product (22).

Analysis of citated in the catalogue maps and atlases shows general tendency of evolution from creation of special cartographic means of data organization to using of existenced digital data of general purpose for atlas cartography. Among them: data base GEOMULTDAT (20), regional dats base HUNTADATA (42), Data bank of Atlas obyvatelstva CSSR (22), reference data bank СИНОПТИКА of climatic issue of ВНИИГМИ МЦД (1,2), biological data base of the Atlas of australian birds (40). Locality part of data described network of spatial objects (first of all geographical base data elements and regional unit boundaries) is sometimes gotten directly in digital form from national topographic surveys or many-sided cartographical data banks, for example WDB1 and WDB2, whose records were used for reproduction of geographic bases of NODC catalog of OCSEAP data (36).

Areal units types

The genesis and property of source material — are the most important features defining a lot of kinds of area units, using for mapmaking — area units of data representation. There are two different area unit types:

1) *regional division units* used for maps of social-economic and demographic atlases and

2) *regular area units* (grid cells) created for geochemical, geophysical, hydroclimatic map themes.

A number of regional division units varied from few dozens and hundreds to some thousands (17, 29, 45). The record-holder is the Atlas of population and housing (41).

The maps of seven its volumes reflect statistic data on more than 13,000 census units. Two or three grids of regional division units of different hierarch levels are used in any cases: communes and cantons (21); counties and local administration units (12,13); census units and town block (17); wards and boroughs (15); provinces, districts, municipality and communes (43); different combination of census units (43); districts, subdistricts, town blocks (42); so called MS-regions, their combinations, cantons (MS-region is special mapping unit based on boundaries of different types) (23).

There are another problems of information and cartographical means if it is necessary to base on a single whole hierarche level in the case of different structural administrative divisions of various countries, as it is necessary for the Atlas economique de l'Europe.

Reorganization and changes of administrative boundaries forces discrepancy between locality organization grid of source material and cartograhpical units and as result request special preliminary actions of data processing (14, 15, 29).

There are examples of carrying out possible users wishes to have (or to get without difficulties) regional (position) representation of cartographical data, both in form of different hierarche levels and of some other mode, for example by using of transparented overlays, contained boundaries of some areal grids, differed from items of maps of atlas (23,41).

About the half of analysed maps and atlases of geochemical (8, 11, 20), geophysical (9, 30-33, 37, 45,47), geological (10), climatic (1,2,18), oceanological and oceanographical (3, 46), biogeographical (40) and agroecological (5) and other thematic (16,27,38) are based on principles of grid cells data organisation. The special group is formed by maps in which grid cells are used for describing of zonation units.

The choice of the grid cells as a base for data local organization and map-making units is connected with:

a) features of source data (point data localization of measuring-observing nets of collection of hydroclimatic, oceanological, geophysical information, point sets of sample selection places, of fauna registration with longitude/latitude reference of point features)

b) features of reflection object (*the fields* of geophysical, geochemical, climatic or other parameters are representes by applicates sets in regular or irregular placed points)

c) cartographic representation type (graduated symbols, referenced to node points of regular grids)

d) type of used means of the graphic devices (as a rule they are raster graphics devices).

Regular grids are differed on the mode of its localization and cell value. The grids existed in the geographic co-ordinates system of different angle dimension cells - 1 x 1, 2 x 2, 2 x 5, 5 x 5, 5 x 10 degrees; 5,5 x 5, 7,5 x 7, 10 x 10 minutes - are the most util. Cells referred to kilometer grid (20 x 20, 6 x 6, 5 x 5, 3 x 3, 2,5 x 2,5, 2 x 2, 1 x 1 km) are used on maps of large and middle scale. Value of appropiated cartographic units is changed according to map scale from some dozens of square millimeters in doubtless mozaic maps till hundredth parts of millimeter in microraster images of geophysical fields and relief.

Methods of primary data processing

Existence of prepared digital data sets does not get out from necessary completing of any operations preceded modelling, analysis and visualization. Operations of preliminary data processing may consist of :

- data retrieval
- converting of structures and representation format
- accuracy testing
- selection of unreliable statistic data
- time-locality homogenization

- filtering and interpolation of surfaces and time series
- filling of gaps in data tabs
- aggregation
- transformation of absolute factors to ratio
- other simple arithmetic and logic actions.

Model types

Stage of generation of map representation is often preceded by data transformation more solid than preliminary data processing. Tendency to add map image with features more widely opening maps themes — statistical mode estimation, mediane, arithmetic means, dispersion or standard deviation, hystogrammes or cumulates (1,3,4) — is already shown in the earliest computer atlases. Among them the following are known widely:

- regression analysis (6),
- correlation matrix evaluation (43),
- evaluation of other factors referred to mapping variables (41),
- application of methods of multivariate statistical analysis — factor analysis (10, 17, 25, 42) and principal components method (7, 15, 16),
- cluster analysis used for regional division and information synthesis (10, 16, 17, 25),
- time series analysis (39),
- discriminant analysis (10),
- digital terrain modelling processing (11, 27, 44, 47),
- compilation of nonspatial liked map representations - anamorphoses, topoides (25).

Special software or well-known software packages — SAS (11), SPSS (16, 17), SASPAC (16) — are used during mathematical statistical evaluations. May be mentioned others modells such as: climatic models of air pollution (k18), evaluation of "complex function of service", evaluation of "migrant activity of division" (22), the model "centre-peripherie". Results of modelling generate new themes, are organized in tabs form or additional graphic equipment of thematic sets.

Modelling possibilities of citated atlases don't confirm an idea that authomatic cartography production is too analytical.

Hardware and software types of computer map design

Different means are used for cartographic visualization of data (printing, fair drawing, photographic registration, engraving). Early computer maps are compiled with help of non specific cartographical means — *line printer,* which let nevertheless imitate some graphic features of maps (bars, hatching, shaded solid) with computer symbols (4,5,34,35,38). In the Atlas of Atlanta for printing of line-printer map have been used well known through over the world Package SYMAP of Laboratory for Computer Graphics and Spatial Analysis of the Harward University. Numerous computer atlases printed at the beggining of 70's years have been based on this package.

An active apply of different *plotters* (registrating map representation on paper listing, photosensitive emulsion, film, coated plastic) refer to this time. Such as: belt-bed, slat-bed and drum plotters, different vector-oriented devices used for plotting, drafting, photographic registration, engraving of line-symbols and for imitation of shaded solid by line patterns of different degree of darkness.

A half of citated maps and atlases have been compiled using plotters. Software of graphic system SURFACE II and package of map design MINIGRAPH (11), system of automated map-making GIMMS (12, 13, 16), packages TELL-A-GRAF (16), INKAS-P (17), SICAD and SIKART (18), automated cartographic system (22), packages COPAM and VCPLOT (23), CompMcBross (25), MSDAMP (38) have been used for map representation.

From the beginning of 80's years *raster graphic devices* are applied widely; such as: dot-matrix printers, electroststic printers/plotters, laser raster plotters, ink-jet printers. The manner of raster computer map representation detailed on micro-mosaic pixels is their aggregate feature. Eighteen maps and atlases described in the catalogue are compiled by use of raster graphic devices, among them: laser plotters APPLICON (20,37) and SEISCOM (14), electrostatic plotter Versatec (17).

Three above mentioned types of machine graphic devices form genetic series, determinating (together with other important features) graphic design of automated cartography production according to the first, second and third generation, which can be approximately refered to periods of 60's, 70's, 80's years.

Cartographic representation types

The evolution of graphic means can be regarded as a tendency of approachment of machine graphic design to traditional map production, as transition from simple imitation of some classic representation types to using of all avialable means together with appearance and fixation of new graphic forms, in ways never previously imagined in non automated environment.

Method of *choropleth* mapping since J.Bertin's works have been prevailed in computer maps of the first and the second generation by virtue of relative simplicity of its realization. Simple "filtration" of statistical data trough "sieve" of area units were vary handy and causes the whole production line of computer atlases, using only choropleth for map representation. New features applied in computer-generated choropleth maps are:

- using of different formal rules of choice of class intervals together with analysis of hystogramma or cumulates type
- using of the last items for legend of chorograms representation (11,26) or in addition to legend as graphic or tabs (11)
- using of micro- and macro-raster dot-pattern (graduated) shading (29)
- application of continuous-tone map symbolization whose shading density (percentage of ink coverage) put in exact accordance to value range of map object (23).

The last is one of the not numerous new methods appeared because of automated cartography.

The second (by frequency of appearance) method using on social-economic map is *graduated (proportional) symbols* (sectored and unsectored pie-charts) in skeleton and filling form using different figures such as: circles, multi-bars, rectangles, quasi-rectangles symbols, regular polygons.

Graduated symbols (point referenced) have been used only in Atlas obyvatelstva CSSR (22).

A large serie of maps compiled by methods of *random points* is offered in U.S. Navy marine climatic atlas (3) of the world.

Not numerous examples of *linear symbols* (multi-linear image of fluvial characteristics) one can find only in Umweltatlas Berlin (18). Seldom examples of realization of *contour maps* show that using of formal and not perfect interpolation procedures from irregularly-distributed points to contours can provocate non correct contouring (1, 2, 45). The using of a laboured method is necessary to correct contours, it consists of: smooth and adjusting automated generated contours, their manual drawing, digitizing and the second plotter drawing.

Computer cartography forced development of *method of relief depiction:*

- perspective hill-shading relief representation on The map of relief of Takada and Nagano (27) which could not be done by traditional engraving;
- three-dimensional perspective "fishnet" representations overlaid solid-colour planimetric thematic layers in Lord Howe Island Regional environmental study (44);
- three-dimentional transformation of remote sensed images in Geochemischer Atlas der Republik Osterreich (11).

Numerous raster mode generated geophisical maps on which microraster unit (pixel 0,2 x 0,5 mm in map scale) is put in accordance to colour pattern of unclassed or multiclassed colour wedge (till 90 classes) characterizing by unvisual degree of colour units in sequence, that liked colour half-tone photographic registration, not mosaic map.

Extreme plastic representation of according magnetic, gravimetric and other geophysical fields is able due this mode.

Features of structure and design

It is doubtless that a lot of described cartography production has more or less "machine" shape, although the atlases reproduce traditional features of maps' content, structure and design. For example the extreme short of computer atlases of the first generation did not often allow possibility of reproduction of detailed *base data* on a very single map. The transparent overlay (with boundaries of regional division units and other reference type elements) has been used for this purpose.

Supplying maps' *legend* with hystogrammes of distribution of mapping factor, including of graphical materials, tabs repeating or enriching cartographical means of map theme expression have been able due automatical technology.

The configuration of external base data is changed, uncluding of various auxiliary cartographical, textual, tab-form elements in various combinations.

There is trend of the essential increasing of textual or some *noncartographical* elements part and expansion of their functions: detail of data processing methods, regional characteristics of mapping object, detailed spatial mapping analysis, comparative analysis of map content with interpretation elements and conclusions. "The economic atlas of China" (25) and "Lord Howe Island: regional environmental study" (44) presenting typicaly album-monographic editions with immersion of cartographic materials into noncartographic environment are examples of such editions.

Conclusions

Production of automated map-making is becoming the object of history imperceptibly but steady and is accumulated a mass of experience of digital and automated tecnologies development; this experience can be of special interest not only to history of cartography but also to forsight of their evolution.

Doubtless the citaded editions have some features which define the image of automated cartography production of the fouth generation — electronic maps and atlases of the 90's.

The possible directions of the catalogue using can be the following:

- theoretical generalization of automated cartography experience for history of atlas map-making;

history and methodology of separate branches of thematic cartography; analyze of map language evolution; prevision of strategic directions of cartography development as a whole

- using of existing maps and atlases in compiling of analogical production (from the standpoint of themes, topical structure, system of map factors, cartographic representation types and so on)
- training of computer map-making; organization of partitions of laboratorial studies and lection cources (including computer- or video-means of training).

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The Contribution of Maps to the Development of Society

Yevgeny P. Arzhanov
Assistant Professor, Geographic Faculty, Moscow Pedagogical University, USSR

Summary

1. We consider this problem not to glorify cartographers working on the field and at the library and not to evaluate in the abstract way the benefit derived by society from the use of one of the iconic models — the map.

We would like to focus our attention on another thing — what should be done to make this contribution bigger.

It is known from the theory of cognition that with the development of the intellect of society people will use iconic models to a greater extent. In this sense cartographers do not face unemployment. However, the development of mapping can be hindered by erroneous concepts, selfish interests of individual members and groups of society, incompetence of persons who are engaged in decision-making, etc.

2. Without dwelling on successes and drawbacks of cartography in various countries let us note some widespread shortcomings.

State services not always ensure the planned collection, processing and regulation of information needed for mapping. For this reason there can be the discrepancy between spatial-temporal characteristics of the content of maps.

Often the uncertainty in the concrete function of maps and recommendations concerning their use hinders one to determine and control the criteria of their quality.

The underestimation of the language of the map not infrequently hinders the improvement of state sign systems, as well as standardization of geographical names.

It is known from theory that the state should ensure the priority of the social effect in cartography over the economic effect. The state cartographic service should function under the highest body of executive power in a country. The deviation from these requirements can affect the completeness and quality of the system of cartographic works and the level of the population's cartographic and geographic culture.

Informatization of society and changes in the world information order give a new idea of the mapping service for society. It includes not only the preparation of the necessary quantity of maps and atlases, but also the priority development of cartography as science, a method, a language, a state information service, a system of cartographic works — the subranch of the printing industry.

The cartographic aspects of new thinking call for a more exact definition of the concept of cartography, principles and priorities of cartographic activity, long-range plans of mapping and cartographic cooperation.

3. In our opinion modern ideas of cartography cannot be interpreted as an idea less wide than a particular case of reflection understood philosophically (reflection is a fundamental property of matter). This particular case is characterized by

- a definite causality, i. e., the goal, and functions;
- the fact that space-time relationships are predominantly reflected;
- the fact that reflection is carried out mainly on or with respect to the planet;
- the fact that reflection is perfomed chiefly with the aid of a specific natural language designed for the predominant use of one, the most powerful channel of information transfer (vision for the sighted, the sense of touch for the blind and for people with poor vision).

Philosophy gives cartography the concepts: space-time, information, a sign and an image, logical transformations, etc. The applied theory of reflection, logics, semiotics, linguistics and psychology of perception are becoming a direct scientific basis of cartography.

The adoption of this concept implies the assumption of responsibility for the objectivity of reflection of our reality and the past. The social role of the map is determined by its basic functions:

- as a measuring model;
- as a means for the accelerated transfer and perception of information;
- as a nomogram or a graph for solving definite tasks;
- as classification, a table and a means of regulating information;
- as a means of the compression of information;
- as a data bank and an information carrier.

4. The goal of cartography as a particular case of reflection is the attainment of the level of public consciousness. It corresponds to the wide use of cartographic concepts in society and to a broader use of maps and pictures taken from aircraft, helicopters and spacecraft in day-to-day activity, specifically, for school disciplines and for use within a family.

To achieve this aim cartographic activity should be based on the following principles:

- the priority of the task of generating new knowledge with the help of mapping;
- the priority of the social effect over the economic effect;
- the priority of mapping of the global problems of humanity;
- reliance on the achievements of fundamental sciences.

5. One of the cartographic aspects of new thinking consists in implementing international cartographic projects, in promoting international cooperation in all directions ranging from the unification of mapping techniques and sign systems to the improvement of methods of the transformation of information and scientific forecasting.

International cooperation should be conducive to the improvement of legal information order and should be based on the following principles: the significance, i. e., the recognition of the social importance of cartography; the scientific value, i. e., reliance on modern science; professional competence; encouragement, i.e., assistance to beginners; consensus, i. e., the striving for solving problems on the basis of consensus; stability according to which the decisions taken should not be changed without weighty grounds.

The activity of the International Cartographic Association and, in particular, the fruitful activity of IFLA, can be given as a positive example of such cooperation.

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'The Indivisibility of Art Librarianship'

Philip Pacey
Lancashire Polytechnic, PRESTON, Lancashire, United Kingdom

ABSTRACT

The 'indivisibility' of art librarianship was first invoked as a plea against the diverging of art librarians and visual resources professionals. The existence of separate associations has not, however, prevented dialogue and cooperation between these two groups. This illustrates the fact that the indivisibility of art librerianship is not absolute and beyond question; not only art librerianship, but art libreries and their usert, art documentation, and art itself, are divisible. Art librarianship has been and is being made art librerians; it is assembled from diverse, divisible components; ist indivisibility is a consequence of its being well made; it can be sustained, abjusted, or dismantled as a matter of choice. Art librarians are urged to remain undivided, not least because they can learn from each other about the breadth and variety of art and the many different kinds of people who can benefit from art libraries.

'THE INDIVISIBILITY OF ART LIBRARIANSHIP'

The phrase 'the indivisibility of art librarianship was coined by Wolfgang Freitag for a paper he presented to the IFLA Section of Art Libraries at Montreal in 1982.[1] The purpose of his paper was to plead for art librarians and curators of visual resource collections to work together as one profession instead of following separate routes and forming separate associations. As it happened, the Visual Resources Association was inaugurated in the same year, and some visual resource curators undoubtedly do regard themselves as a distinot species; nonetheless the existence of separate associations has not prevented cooperation between art librarians and visual resources personnel, and indeed many individuals, art librarians and visual resource curators, belong to borh an art librarians' association and the VRA. It is evident, then, that divisions need not divide us utterly; walls, where they must exist, should always incorporate exits and entrances.

The thrust of Wolfgang's argument was art librarianship involves the application of a coherent range of skills to a diverse yet indivisible range of materials. As art librarians we are responsible not simply for books, or for books and journals, but for books and jiurnals which include images, and for books which include little or nothing but images, and also, for images in 'non-book' formats of various kinds, and even for moving as still images. The users of art libraries, eager to learn more about art, do not come seeking information only from books, or only from slides, for instance, but from any format which can provide some of the information they require. Information about art which consists of both images and words will very often be more useful, and will invariably be more nearly complete, then images by themselves; neither can tell whole story without the other.

So far as libraries abd art librarianship is concerned, the argument is irrefutable. There may good reasons for a visual resource collection to exist in ist own right, although it will almays be the poorer without a complementary library somewhere close by. But for an art library to exclude visual resourges is an impossibility; its books alone contain thousands of images. Art librarians must therefore be visual resource curators also; we cannot divide ourselves in two; this indivisibility is true of all of us. Art librarians are united at least in their involvement with verbal and visual information; with documentation, in all its variety, of art, in all its variety.

The uniqueness of art librarianship therefore derives from the visual nature of visual art. In terms of Boolean logic, we art librarians occupy the common ground of two intersecting circles, representing art on the one hand, and librarianship on the other. But does this combination of interests result in a discipline so concentrated, so tightly defined, that it is impervious to fracture and cannot be subdivided further?

In addressing the divergence of art librarians and visual resource curators, Wolfgang Freitag acknowledged a degree of instablity within tne library profession. In fact, 'librarianship' is nowadays too narrow a term to encompass every kind of information professional. We art librarians are a potentially unstable amalgam of museum librarians, college librarians, public librarians, visual resource curators, information officers attached to design or architectural practices; we are responsible for very different libraries serving very different users. And what of art? Hard to define, art may sometimes convince us that in spite of its diversity it really is all-of-a-piece; at other times, or indeed at the same time, differences stand our and appear to distinguish one 'piece' from another. What, for example, do industrial design and icons have in common? 'Art' dissolves into 'the arts'; the arts merge with 'culture'. Art is a gloriously unstable, an excitingly explosive mixture which draws energy and inspiration frim outside, and overflows beyond, its own shifting boundaries. Moreover, art is vitally and intrinsically inseparable from human life and experience; design is inseparable from technology; illustration has served as a tool of science, and science can assist the investigations and explorations undertaken by artists. Many 'art libraries' also contain at least some material on other subjects; that was certainly true of the first art library I worked in, but I have gradually come to think that the nature of art is more accurately reflected by more general libraries such as the polytechnic library which I work in now, in which art is just one subject among many — nor is it neatly enclosed, for its spills into other areas, and they spill into it.

In his paper on the 'indivisibility of art librarianship', Wolfgang Freitag expressed concern regarding

> the potential dynamite which could blow our art librarians' societies to pieces if other groups, such as art school and architecture school librarians, seceded, if only temporarily, form splinter organisations serving only part of our constituency.

But our constituency is divisibly; art historian and artist are likely to be as different from one another as any two people can be; artists can differ markedly from designers; art historians divide themselves into different camps, and in recent years we have witnessed the emergence of design historians who in Britain if not elsewhere have formed their own association. Nor is the exclusive property or talent of professionals, whether scholars or practitioners; for art librarians who work in public libraries in particular, it must be true to say that 'our constituency' includes everybody.

When I set out to prepare a paper on the 'indivisibility of art librarianship', it was not my intention to challenge or to undermine that concept, but rather, to affirm it. And so I shall. But while I was preparing this paper it became clearer to me, to my surprise, that our indivisibility is not an absolute underpinned by absolutes; it does not rest on an indivisible library profession, or on an undevided constituency of users, or even on an indivisibility inherent in art (and if art is div divisible, so also muat be art documentation). We cannot lean back on any external supports with total confidence. For it is true, is it not, that nothing is indivisible — except the i integrity if individuals, and in a profound sense, everything? Although we human beings do divide and categorise the world and ourselves, in many different ways, and for many, often practical, purposes, the divisions we make cannot be fixed or final, and should never — though they too often do — prevent cooperation or interaction: the boundaries which we construct we can also cross; walls which merely obstruct should be torn down.

Art librarianship is something we have made; Wolfgang's paper traced of the history of its making. Art librarianship is some something which we have made and which we are still making; it is indivisible to the extent that we have made it so; it is the more indivisible because we have made it well, not so much for ourselves as for those we serve. We have made and are making it indivisible by refusing to allow divisions, between different types of art library or between art libraries in different countries, to divide us. We make art librarianship, not only in our separate libraries, but also, connecting the paris together, in conferences, visits, associations, professional publications, and not least (and in a sense, above all) in our forming and developing of this international Section of Art Libraries. We have not allowed our different languages to inhibit communication between us. We have, by and large — and in spite of the diverging of art librarians and visual resources curators — heeded Wolfgang's advice:

> ... Let's stop splitting hairs and get on with the work. A lot needs to be done. In order to fulfil the many tasks that lie ahead, we cannot abide factions or fractions. We need a true union.

But still, and always, the indivisibility we have achieved rests on our free choice. We can deconstruct and rebuild it any time we like.

I rejoice in our indivisibility all the more because we have made it out if divisible things; our differing jobs,our various libraries, our motley host of users, the different countries and cultures we represent, the myriad nature of art. This is our strength, the over-riding reason why we should choose to remain undivided, the explanation of why we have so much to learn from each other. We can be more effective for being larger rather than smaller; but not only that: the work we do together is better because we bring to it so many different points of viem. We learn from each other, not only of publications and b bibliographies, of skills and methods, of new media and new technologies, but also, of the richness of art and of the breadth of 'our constituency'. We have come a long way since those early days when, in 1979, it was possible for art librarians to meet at the IFLA Conference et Copenhagen without making contact with Kunstfaggruppen, the Copenhagen-based group of art libraries working in public libraries. Not least through meeting colleagues like those,we have extended and deepened our awareness that art libraries can benefit many people besides a scholarly elite. We have recognised the 'Vitsl arts, vital libraries' of developing countries.[2] We have welcomed documentation of previously overlooked women artists, and of works by women and men who would never have thoughts of themselves as artists. Challenged both by myself and by Clive Phillpot[3] in our meetings at Chicago, the Section responded with a conference which fook for its theme Clive's title, 'Art libraries for the people'. [4] From our users, and from one another, we are learning to expand our vision of what art is and whom it involves. In doing so — in adding people and artefacts to an indivisible core of art from which they had been divided — we are assembling a wider view of art which, because it is less obviously indivisible, is more rewarding to piece together and to perceive as a whole.

In one the Section's Standing Committee meetings (which, since we are indivisible, are traditionally open to all) last year in Stockholm, Ase Markussen suggested that in organising its conference programmes, the Section should make it possible for different types of art librarians (such as college, or museum, librarians) to meet separately. This is a good idea, providing that time is available to allow this to happen in addition to meetings of the whole Section; indeed, the smaller groups could report back into a plenary forum. (I do not share Wolfgang's apprehensions concerning 'splinter groups', so long as they can be persuaded to stay in touch with the main body of art librarianship). At the same time, it is good that as art librarians we meet in conjunction with the annual gatherings of librarians of all kinds called together by IFLA, where we can meet with librarians of other kinds and interact with other IFLA groups. (I am not inclined to idealise IFLA, which is much too much of an exclusive club for library bosses, its conferences too lavish and well-appointed — and therefore too expensive — for many humble art librarians to attend; yet our indivisibility has drawn strength from IFLA's great virtue, that it represents the whole world of librarianship). The indivisible body if art librarianship should not be allowed to stiffen into rigidity; it should rather be dynamic and fluid, combining an ability to form effective sub-groupings wirh a willingness to dissolve internal divisions and to reach beyond its own boundaries. Art librarianship is something we have made; we are still making it, and its ever-changing shape is within out power to control. Let us choose to remain undivided, no less confident because the choice is ours, and proud to be members of a community which represents the diversity and indivisibility of art and of humankind.

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2. Vital arts, vital libraries: cultural life and tradition in developing countries and the role of libraries: papers from the IFLA Congress at Nairobi, August 1984. (Preston): IFLA Section of Art Libraries with the IFLA Round Table on Audio-visual Media, 1985.

3. Pacey, Philip. 'The universal availability of art publications publications: a global context'. Art Libraries Journal vol. 10 no.3 1985 p. 7-30. Phillpot, Clive. 'Art libraries for the people'. Art Libraries Journal vol. 10 no. 4 1985, p. 3-11.

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International Exchange of Art Publications: Some Points for Discussion

J. Margaret Shaw
Chief Librarian, Australian National Gallery Research Library, Canberra, Australia

ABSTRACT

Art libraries are particularly well placed to operate international exchanges of publications since they have access to suitable exchange materials. It is nevetherles necessary to be aware of the hidden costs which can exist and to examine the reasons for and cost-effectiveness of exchange programmes. Guidelines for efficient and effective exchanges are suggested for discussion and adoption by the IFLA Section of Art Libraries.

International exchange has been carried on between libraries since the Seventeenth Century and by the Nineteenth Century had spread from Europe to North America and other centres of scholarship around the world.

It has also been a matter of keen interest to IFLA particularly in relation to its importance in furthering the goals of ALP/UAP.

Much of the work done in coordinating or standardising exchange has been at the national policy level, in relation to the exchange of government publications or to the role of centralised exchange bureaux such as USBE (Universal Serials and Book Exchange) or the now defunct Clearing House at the National Library of Australia.

Regardless of the success or otherwise of these operations, recent changes in the level of resources available to libraries throughout the world are forcing us to look more closely at the appropriateness and efficacy of exchange.

In late 1990/early 1991, Jennifer Trezona of the Art Institute of Chicago collected information on the policy and practice of exchange in art libraries. She has generously made her collated results available to me and I have incorporated many of her findings into this paper. Exchange of publications falls into two major categories: exchange of one's own institution's publications; exchange of duplicates. The former is more common and will be the subject of the bulk of this paper.

Exchange of own institution's publications

Art libraries are peculiarly well placed to profit from the operation of programmes of international exchange of publications. Whether they are autonomous, part of a museum, or a department within an academic or public library, they tend to be, or to be a part of, an institution which publishes art related materials which are of interest to their fellow art librarians. That is, they have the necessary «barter currency» available.

This can lead to a tendency to think of exchange as a professionally and morally «good thing» without being too critical. This may put burdens on both the supplier and the receiver which have a negative effect.

Whether the Library pays for publications distributed on exchange or whether the cost is absorbed elsewhere in the organisation the cost of their production must be covered.

In addition, packaging and postage of exchange materials is not cheap and can add up to thousands of dollars per annum. It is disturbing that 61% of art libraries can not give a figure for their postage costs.

Exchange is also a relatively labour intensive operation, particularly for one-off exchanges which require more work than a simple purchase.

In summary, exchange is not a cost-free substitute for purchase.

We must be very clear as to why we operate exchange systems, the benefits we seek to acquire from them and the efficiency of our methods.

Having issued these warnings, it should be said at the outset that, for many art libraries, exchange is a vital part of the collection development strategy without which collections would be much reduced both in quality and in quantity.

At this point I should like to thank all those libraries which supply my library with exchange publications on a regular basis, particularly those who were prepared to do so before the Australian National Gallery had an active publishing programme. I hope they now feel that their investment in the future is beginning to pay off.

Publications exchanged

The types of publications exchanged differ from those in the scientific and other fields. Although some art libraries distribute scholarly periodicals as part of their exchange programme, the majority of their exchange items tend to be monographic works, particularly exhibition catalogues.

In addition, there are many smaller items: newsletters, calendars, brochures, posters and reproductions which can be exchanged to great effect. These are often items not readily available through normal trade sources, as indeed are many exhibition catalogues although the market for the latter is coming becoming increasingly organised.

Reasons for operating an exchange programme

The reasons for operating an exchange programme can be economic, practical, promotional or philosophical:

- To supplement shrinking acquisitions budgets. This must be balanced against a) library costs in other areas and b) the appropriateness of publications received.
- To overcome the problems of lack of foreign currency to purchase publications from other countries.
- To ensure full coverage of the publications of another institution. This assumes reliability on the part of the exchange partner.
- To obtain research or ephemeral publications not available through the normal retail sources.
- To obtain out of print materials for which a library's exchange stock may be the only source.
- As a method of exchanging information between researchers in our respective institutions.
- As a method of promoting the activities of one's parent institution or country both through making the publications available and by causing them to be listed in catalogues and bibliographies.
- As a method of providing assistance to less developed or less affluent libraries. This may be as foreign aid or, in the case of national institutions, it may be a part of an institution's national responsibilities.

All are valid reasons.
All require monitoring for effectiveness and cost-benefit.

Types of exchanges:

Types of exchanges fall into four basic categories:

- Complete exchange in both directions between two libraries.

  This is most effective between institutions with similar subject coverage and rates/quality of publishing.

- Complete exchange in one direction with a selection of publications in return.

  This usually applies where the rate of publishing varies. A smaller institution may supply all publications to a larger one and request particular titles in return. Problems can arise when the selection of return publications is controlled by the larger institution. This can lead to duplication or the supply of inappropriate publications.

- Item-for-item exchange.

  This can be on a regular basis or the result of a one-off request. Many such requests are straight-out begging. This is not necessarily bad but success is more likely if something is offered in return. Enclosure of a list of publications available in return saves extended correspondence.

- Exchanges between groups of libraries or between one library and a group of libraries. In this case one library may house a central exchange office which gathers receives and distributes exchange publications in bouth directions. Some of the Smithsonian Museum Libraries and those of the Musees Nationaux in France operate in this fashion as do some groups of libraries in the Soviet Union.

The majority of art library exchanges are the result of agreements between two libraries rather than part of large national or international schemes.

Problems in operating exchange programmes:

Problems for the supplier library:

- It is not always easy to locate and acquire publications as issued. Even where there is a central Publications Department, the spread of desk-top publishing is creating a plethora of decentralised publishing activities eg of smaller exhibition catalogues, pamphlets, reports etc. . This makes keeping track of the total output very difficult at times.

- Joint publications are becoming more frequent. These may be in co-operation with a commercial publisher, with other institutions, e. g. for a travelling exhibition, or a combination of both. In such cases the availability of copies for exchange will depend on the terms of the joint contract.
- Some libraries cannot guarantee continued supply of publications because of precarious budget situations or an inconsistent internal supply of publications to exchange. My own library is one where we have gone from no charge to the Library for exchange publications, to cost price, to cost price plus ca. 10%. It needs to be remembered that Publications Departments are also under pressure. Any evidence of the promotional aspects of exchange can be helpful.
- Cost of packaging, postage, record keeping and storage space for exchange stocks. Stores should be kept at a reasonable level, but there is also a need to be aware when publications are likely to go out of print at which point to acquire a few extra copies is advisable.
- There is a need to monitor the balance of materials received to that sent out. This requires fairly detailed record keeping and must take into account the receipt of periodicals which may be accessioned through another section.

Problems for the receiving library:

- Reliability of supply is always a problem. Claiming is time-consuming and depends on knowledge of what has been published by an exchange partner.
- There are problems for receiver as well as for the supplier with joint publications.

  How does the receiver know if a publication will be supplied?

  Will commercial publications be available?

  Will a travelling exhibition catalogue be supplied only by the originating institution to avoid duplication? In this case does the library have an exchange with this institution?

  Where there are multiple editions of an exhibition catalogue for different venues there is considerable danger of duplication by purchase of another version of the publication. Citations and title pages, often neglect to note the links to other versions.
- Duplication is always a danger unless supply policies are very clear.
- Relevancy is another consistent problem. Supply of irrelevant materials is a waste of valuable resources. Many libraries would like to see a greater degree of discrimination in the distribution of exchange materials. Many are already supplying materials according to broad profiles.
- Delays are endemic to the exchange system and have been increased by the growing tendency for libraries to batch publications mailed out to minimise distribution costs.

Automation

Automation is being used by an increasing number of libraries for Exchange programmes although few have fully automated systems.

- Mailing lists have been automated by many libraries for the production of labels.

  These may be broken down into categories of partners. They can also be used for the preparation of letters for periodic assessments of programmes
- Form letters kept on word processor can save considerable amounts of time for one-off requests. Where word-processing is not available, photocopied form letters may be used.
- Subject profiles for exchange partners can also be automated to help in the appropriate distribution of new titles. (The Victoria and Albert Library does this).
- Items received on exchange can be accessioned through a special programme or as part of a normal, automated accessioning system.

Monitoring of Exchange Programmes

While some art libraries pay little attention to exchange agreements once they are established, the reality of today's economic climate has made most librarians acutely aware of the need to monitor their exchange programmes.

Factors which should be monitored and assessed.

1. Appropriateness of material received. If items received are not appropriate they merely cause extra work for no return and may cost extra money in storage and disposal costs. A good rule of thumb which can be applied is «would I buy this item if I had the money to do so?»

2. Balance of Exchange with particular partners. This requires the keeping of records of material supplied and received which can be compared at intervals. The frequency of assessment will depend on the Library and its resources. Smaller libraries may reassess at each mailing to ensure the best return on their exchange investment. Larger libraries with greater resources and broader collecting policies will probably need to assess every few years.

It is unlikely that detailed costings will be listed and compared but there should be an equivalence in the number, size and quality of items supplied, either individually or in aggregate. Periodicals including newsletters and calendars and the cost of posting them regularly should not be over-looked.

Exchange or Disposal of Duplicates

It may be appropriate to retain duplicates of particular items but for unwanted duplicates there should be an established pattern of disposal.

- Exchange with other libraries.

  This is much harder than exchange of your own publications.

  It should be remembered that the costs of storage, listing and distribution of duplicates by exchange may be high, too high on occasions for single items of little cash value.

  For the receiving libraries, the work of checking random lists for the occasional «gem» is considerable. It is also disappointing if, after the work is done, the item is found to have been given to another library already.

  This is a particularly complex version of one-off exchanges.

- Gifts to other libraries.

  This is a method of disposal of duplicates which appeals philosophically to most librarians.

  The problems are as for Exchange of duplicates

  Occasionally, fellow libraries may be able to visit and select items in person which is more cost effective for the donor library.

  Alternatively, small or new libraries may be prepared to accept unlisted groups of materials.

- Gifts to charity.

  Some charities run book fairs as ways of raising money. This may be an appropriate method of disposal which makes use of the material with little work or cost to the donor library.

- Sale to dealers.

  Again, the cost of listing items may be prohibitive unless dealers are prepared to make an offer for a «job lot» of materials.

  Some degree of sorting would be necessary under the supervision of staff qualified to identify valuable items for individual pricing.

- Sale to staff or public.

  Some libraries use this method. Too much time should not be put into individual pricing of materials.

- Disposal for recycling or as rubbish.

  This may not be as easy as it sounds. Recycling agencies may not like handling books or collecting relatively small amounts of material. If you remove covers and can deliver to a recycling centre you have a better chance of success.

  Disposal as rubbish is probably the least appealing method from the librarian's point of view but on occasions it may be the only practical approach.

In summary, disposal of duplicates is not a simple, or cheap, matter. It is preferable to put in place mechanisms which may help lessen the number of duplicates received.

Co-operation in standardising exchange practices

The raange of exchange activities in art libraries is very wide and many art librarians do not believe that standardisation is possible. However, there are a number of ways in which we can co-operate to make exchange more effective.

In particular, there are a number of fairly simple procedural methods which, if agreed, would save us all time and money at the same time as producing more effective and appropriate patterns of exchange.

I should like to suggest that the Section of Art Libraries should establish *Guidelines for Exchange* which could be used by art libraries around the world.

These need not be lengthy or over-complicated. Nor should they interfere with the need for flexibility in exchange arrangements.

The following is a list of points which could be covered by such Guidelines.

(1) Definitions of the various types of exchanges which will help librarians know exactly what their rights and responsibilities are.

(2) Lists of publications available on exchange.

Each Library should keep an up-to-date list of materials which it has available for exchange. A clear and well constructed list should give:

- full bibliographic details;
- brief indication of subject matter (according to an agreed list of Exchange classifications see 7 below);
- if appropriate, the level (children's books, teaching aids etc.);
- the recommended retail price of the item;

These lists should be included when requesting a one-off exchange to save the need for subsequent correspondence.

They should also be distributed to regular exchange partners at least annually.

(3) Address labels.

Inclusion of a Return mailing label with one-off requests would both save work and ensure correct delivery. It is easy for exchange items to go astray if the address is not sufficiently specific.

For regular mailing lists, ensure that the address is sufficiently specific.

It is up to receiving libraries to notify their exchange partners if more detail is required.

Specific address details should be provided when new exchange agreements are set up.

(4) Notification of exchange plans for the year.

It is not always possible to predict what will be distributed in advance. Publication programmes and dates vary. Inclusion of calendars etc. in exchange programmes can help.

Advance notice would be particularly useful in the case of libraries which send material only in response to publications received, a practice which can lead to duplication or gaps in the collection. Exchange partners could then request appropriate items rather than waiting to see what will turn up.

At the least, libraries should try to follow a fairly regular pattern of distribution e.g. every 3 or 6 months, so that partners can have a reasonable idea of when to expect publications to arrive.

(5) Notification of items which will *not* be sent on exchange so that partners can purchase them before they go out of print including joint publications as well as those which are excluded for reasons of cost or weight (postage cost).

(6) Acknowledgment of receipt of items on exchange.

Many libraries acknowledge all items received on exchange. Some acknowledge only annually and some not at all.

Agreement to discontinue this practice would save considerable amounts of time.

Libraries which need the acknowledgment for audit purposes could include a list to be signed and returned. It is obviously cheaper for one library to make a list and copy it than for each parther to make an individual list.

(7) List of Classification categories for use in drawing up profiles for exchange partners.

Such a list has been suggested by many libraries. It need not be too detailed but should cover broad subject, language, geographic and periodic categories.

(8) Balance between Exchange partners.

Many of the arguments in favour of establishing Exchange programmes depend for their effectiveness on an approximate balance between partners in the value of items exchanged. This value relates both to the cash value and to the suitability of material supplied.

Many Libraries are tailoring their distribution patterns by categorising partners in ways designed to achieve financial balance.

In one-off exchanges, Libraries should try to match their return requests to the value of the items supplied.

Moves towards profiling of partners to allow for the matching of distribution to interests will increase the non-fiscal value of an exchange.

(9) Prompt response to requests for one-off items to enable purchase if necessary before the item goes out of print

(10) Prompt response to all requests for information about suitability of materials received etc. . It is in everyone's interests to cut down on inappropriate and therefore unprofitable distribution.

The purpose of such a set of Guidelines is not to be dictatorial or regimental but to suggest methods which libraries may employ to maximise the effectiveness of their exchange programmes while at the same time assisting their colleagues in other libraries to do the same.

86-ART-6(WS)-E

Materials for the Study of Russian/Soviet Art and Architecture: Problems of Selection, Acquisition, and Collection Development for Research Libraries, in Historical Perspective

E. Kasinec and R.H. Davis
The New York Public Library, Slavic and Baltic Division

ABSTRACT

Presentation of Robert Davis to IFLA Art Libraries Section, Moscow Workshop.

This paper discusses in brief the means by which great retrospective United States collections of Russian art and illustrated book materials developed, and the tools and current channels available for development of Soviet Russian publications. Addressed are the problems facing Western libraries and vendors resulting from the greater independence of publishing houses, and the decentralization of Soviet book exportation.

Introduction

In the last two decades, there has been a remarkable renewal of Western scholarly and popular interest in virtually all aspects of Russian art and architecture. This interest is manifested in a number of ways: in the extraordinary number of large and small exhibitions devoted to the history of various aspects and periods of Russian art (witness the recent Malevich exhibit in Washington and New York); in the large number of auctions and public sales of Russian art and antiquities; and the appearance of an enormous number of publications dealing with virtually all aspects of the fine, applied, and decorative Russian arts.

My remarks today will address some of the traditional channels for acquiring Soviet Russian art and art historical publications, and the growing number of problems associated with their collection development. I include here not only the acquisition of works in the Russian language on fine, decorative, and applied art and architectural traditions as they developed in Russia and the Soviet Union, but also works in the Russian language on Western and other artistic traditions.

First, one caveat. As we are all aware, the Soviet Union consists of more than 100 nationalities, some of which — such as the Ukrainians and Byelorussians — have notable traditions of art and art historical publishing. (1) Both the Georgian, and Estonian Republics have publishing houses devoted exclusively to issuing art historical publications that relate to their rich artistic traditions. Furthermore, *outside* the confines of the Soviet Union, Russian émigrés have continued to publish works dealing with Russian art and architecture as well. (2) The fragmentation of the Union has impacted on the publishing industry as well, posing significant problems for Western collection development personnel. For the sake of brevity, I will focus my remarks on issues relating to Soviet *Russian* art publishing and colportage alone.

Acquisitions and collection development have, of course, two aspects: retrospective and current. In order to appreciate the former in the Russian and Soviet context, some words of historical background are necessary. (3)

Great Retrospective Collections in the United States and a Brief Discussion of their Development

The events of the Bolshevik revolution had profound implications for Russian art and art history. Many notable figures in the artistic and art historical communities left their homelands to settle in Europe and the United States, including such prominent figures as Mstislav Dobuzhinsky (1875-1957), Natalia Goncharova (1881-1962), Lev Bakst (1866-1924), Georgii Lukomskii (1884-ca.1928), and Academician Nikodim Kondakov (1844-1925).

For the purposes of this paper, the event of greatest import during the post-1917 period was the nationalization and government confiscation of many collections of art and art publications from the estates of the gentry and aristocracy, as well as from monastic institutions. On the positive side, this action had the effect of concentrating holdings of Russian and Western art in a number of central repositories, theredy making them more easily available to art historians and the general public. Materials that had hitherto been known only to individual collectors, or had lain forgotten in safe deposit boxes, became public domain. In a fascinating but little-known memoir of this period, one of the individuals chosen to sort confiscated silver relates how a priceless Third Century A.D. Scythian platter was found in an unnamed individual's bank vault in St. Petersburg. (4) On the negative side, this concentration greatly facilitated the sale and dispersal to Western collectors and museums of some of these nationalized and confiscated treasures, in exchange for desperatelly needed hard currency to fuel Stalin's first Five Year Plan. (5) Some of the beneficiaries included the Walters Gallery in Baltimore, the Pratt Collection in Richmond, Virginia, the Elijheim Art Center at the University of Wisconsin, the Minshall Collection at the Cleveland Fine Arts Museum, the Philadelphia Museum of Fine Arts, and the Metropolitan Museum in New York. In his work entitled *Russian Art and American Money* (Cambridge, MA: Harvard University Press, 1980), Robert Williams relates a portion of the story of the sale of Western paintings from Soviet collections to Andrew Mellon, as well as to Mrs. Post and Ambassador Davies during their sojourn in Moscow.

However, facts relating to the sale of art and illustrated book materials, including rare folios, plate books, architectural photographs, and other art historical materials have never really been discussed at length in print. It is only now that we are beginning to get information on this subject from the Soviet side, as the topic was purposefully excluded, forobvious reasons, from scholarly and popular discourse in the days before *Glasnost*.(7) During the 1920s and 1930s magnificent art book collections were sold to the Hoover Institution, the New York Public Library, the Library of Congress, and the Harvard University Libraries. These institutions acquired some of their rarest Russian art and architectural publications during these two decades. These include elephantine plate books of coronation ceremonies, historical and religious antiquities, and photographip albums of provincial cities, many of which are remarkable also for their provenance, having once graced the libraries of the Tsars and other members of the imperial family. One gets a sense of the richness of the materials libraries could select from via any one of the many catalogs produced by American auction houses in this period. The Soviet book export agency Mezhdunarodnaia kniga, too, produced a multivolume series of antiquarian book catalogs aimed at Western buyers. (8)

Today, institutions seeking to develop their retrospective holdins of Russian art book resources, whith were not involved in the acquisition of these large confiscated collections during the first three decades of this century face a daunting task. At the time that the collections were sold, some of the books were priced in the tens of dollars. There is evidence to suggest that some lots were actually sold by weight. Today, when sold by auction houses such as Christie's, Phillip's, Swann's, or Sotheby's, they comand prices in the tens of thousands. Much material is simply unavailable, so that even with substantial financial resources, collection building is a trying task. Nevertheless, Russian art and architectural publications are occasionally available from antiqurian dealers in the West. Among the more important dealers in Russian art publications are Russica, Dorothy Carus, and Ex-Libris in New York; Saint-Peterbourg, and Jacques Polonsky in Paris; Kubon and Sagner in Munich; Phillip Lozinskii in Newport, RI; Timofeev in Rome; and N.K. Pavlov in Dobbs Ferry, New York, to name but a few of the more prominent.

Other than through purchase from antiquarian dealers or at auction, there are just a few other possible sources for acquiring retrospective materials. First, there are a number of art and art historical titles available from micropublishers such as Chadwyck-Healey which several years ago published a set of color microfiche of Russian futurist works, and Interdocumentation Company (or IDC) in Leiden which is the largest and best known of commercial republishers in the West. (9) In general, however very few retrospective works in the field of Russian art and architecture have been reprinted. A perusal of IDC's catalog indicates relatively few titles — and these primarily art journals — which have been made available commercially since the 1960s. There is some hope that this situation will improve. Since 1989, IDC has conducted microfiching operations at the Historical Library in Moscow. It is vitally important that librarians responsible for retrospective collection development in this field convey to IDC their interest in acquiring such materials on microform. IDC has in the past been very responsive to suggestions from library practicioners.

Great retrospective collections in the United States have long been committed to the preservation microfilming of book and periodical materials. The acquisitions officer in search of artrelated monographs and periodicals produced in the Russian Empire or in the Soviet Union can locate many titles on microfilm at repositories with major retrospective collections. The New York Public Library, for example, is now completing a preservation project funded by the United States Department of Education to microfilm its rarest Russian art, architectural, and art historical materials. Positive microfilm copies of these titles will in turn be made available at cost to any institution that requests them.

One final avenue for retrospective collection development is unique to the Soviet book world. Foreigners visiting the Soviet Union on acquisition trips cannot export pre-1945 publications through the open post or among their personal effects at the time of departure. Every book or manuscript dated before 1945 is considered «antiquarian» and thus a «state treasure». The only means of exporting antiquarian publications is though what is termed exchange or barter partners, which will be discussed below.

Collection Development of Current Materials

It was durring the early 1930s that the first publishing house specifically devoted to art was organized in the Soviet Union under the name of Izo-GIZ, an abbreviation for State Fine Arts Publishers. This publishing house was the foreunner of the present Izobrazitel'noe iskusstvo, or fine arts publishing house.

Today, there are a number of publishing houses in the Soviet Union that specialize in art and architectural publications. Among the more prominent are Mystetstvo (Ukrainian), Iskusstvo, Sovetskii khudozhnik, Avrora, Khudozhnik RSFSR, Plakat, Planeta, Khelovneva (Georgia), and Kunst (Estonia). These publishing houses issue publications in a wide-ranging number of areas; Russian art history as well as the art history of non-Slavic peoples. Soviet collections with interest and intrinsic importance extending well beyond the Russian studies field are often the subject of catalogs or descriptions by these publishing houses. (10)

Commercially published materials — that is, published by a state publishing house — come to Western libraries on approval,based on detailed collection area profiles provided to one of he handful of foreign companies officially authorized by the Soviet government's book export agency Mezhdunarodnaia kniga (or International Books), to market the national printed output. Among the authorized agents are : Collets in London; Kubon and Sagner in Minich; Viktor Kamkin in New York and Maryland; Szwede Slavic Books in California; and, for Western-Language imprits produced in the Soviet Union, International Publications in Chicago.

After years of stability and reliability, however, the recent centrifugal political and economic forces in the USSR are exerting a disruptive effect on both publishing and colportage of book and serial materials in all subject areas.

There are several purely practical matters contributing to a breakdown in the flow of materials. First, there is now a chronic paper shortage. Some of the mainline Soviet journals are running year behind schedule, simply because they do not have the paper needed to fill subscriptions. Publications listed in *Novye knigi* which used to appear more or less on schedule, are now failing to appear at all. Indeed, *Novye knigi* itself has fallen far behind schedule — as of March 1991, the most recent issue we had of this weekly publication was no. 48 of 1990. Second, the equipment with which materials are printed is often antiquated. Soviet commercial publications in the art can be of extraodinarily high quality, but some of the best Soviet productions are actually printed in Germany, Italy, Hungary or Japan. In recent years, Soviet houses have concluded joint-venture agreements with formely East German houses, such as Verlag der Kunst. Unfortunately, the princes of these European-printed publications, as well as of those actually printed in the Soviet Union, have escalated dramatically over the past several years. Collections in the United States have been caught between the Scylla of a weak dollar, and Charbydis of Gorbachev's economic reforms on the other. The notion — previously unfamiliar to Soviet enterprises — of *knoziaistvennyi raschet* — the economic bottom line — has become the operative phrase in Soviet publishing. All ventures must now become largely self-supporting. This in part explains the recent Soviet propensity for issuing (read expensive) facsimiles of illuminated manuscripts, 19th-century illustrated books, as well as glossy, lavishly illustrated works. These are directed primarily towards the foreign book market, or the hardcurrency stores of Moscow and Leningrad. (I should note parenthetically that if a Soviet work is priced at 50 rubles, one should expect to pay up to $200 in the West).

Even more troubling, however is the recent breakdown in the system of distribution and colportage. Western collections recently learned that one of the oldest and most heavily-used of Mezhdunarodnaia kniga's representatives — Les Livres Étrangères in Paris — has gone out of business. This came a shock to Slavic libraries in the United States, as LLE supplied virtually all of them. The main reason given was that Soviet publishing houses now wished to circumvent Mezhdunarodnaia kniga completely by trying to establish *direct* sales relationships with collections in the West. The disruption this has caused, the implications for the whole system of acquisition and distribution, and the potential administrative expense involved in direct dealings with a number of publiching houses is of great current concern in the American research library community.

The output of Soviet commercial publishing represents only *one* level of Soviet publishing and research. The development of a truly outstanding research-level collection in Russian art and architecture reguires access to book materials that are far more elusive. This «fugitive» material consists of exhibition catalogs, conference proceedings, works of collection — specific descriptive and enumerative bibliography, lists of acquisitions, and serial publications of various Soviet higher educational and cultural institutions devoted to art history, art restoration and conservation, museum studies, and dissertations and their abstracts. For the most part, these publications are unpriced or nominally priced, but many are virtually unavailable at any price since they are bibliographical rarities that are issued in very limited print runs — at most several hundred copies and sometimes far less. Bibliographically, they are listed in the socalled *dopolnitel' nyi vypusk*, or supplementary issue to the *Letopis' izobrazitel'nogo iskusstva* (Chronicle of the Fine Arts) of the Soviet national bibliography. These publications are obtained via longstanding exchange relationships between libraries in the West and a wide array of Soviet institutions, including libraries, museums, scholarly institutes, or universities and their libraries having governmental permission to export antiquarian publications to reciprocal American institutions. Such relationships require formal governmental approval, and those which do exist have generally been in force for many, many years; in the case of the New York Public Library, some relationships predate tne Russian revolution. Among Soviet exchange partners in the field of art are the Hermitage Museum Library in Leningrad, the Pushkin Fine Arts Museum, the Academy of Arts in Moscow and the Tretiakov, as well as a whole host of other teaching, curatorial, or research institutions throughout the Soviet Union. These institutions circulate abbreviated bibliographic lists which are «rarities» themselves (for example, the list sent reqularly by the Historical Museum in Moscow is produced in a print-run of 60 copies), from which selection officers may make their requests.

Much material of significant research value is obtained through this labor-intensive selection procedure. However, as with vendor-selected titles, a detailed profile for each institution is a must to ensure coverage in areas of greatest interest to the collection.

I should note one development that may have a significant impact on the future of retrospective collection development in Western collections of Slavic materials. The union republic libraries have, apperantly, enormous stockpiles of books set aside for exchange over the years. Under the old, centralized system of library administration, priority for exchanges with the West was given to the Lenin Library here in Moscow, and to the Saltykov- Shchedrin Library in Leningrad. Now, no longer beholden to Moscow or Leningrad for instructions as to what may be sent abroad, libraries outiside of the Russian Republic are ready to offer their stocks abroad.

Conclusion

At this juncture in history, Western librarians, bibliographers and readers stand to fully benefit from the knowledge and expertise of a Soviet art historical and museological community unfettered by political and ideological constraints. It is one of life's great ironies that the same forces and motivations which have brought the USSR to this point, also threaten their ability, and ours, to fully benefit from this economic, ideological, and political sea change in Soviet society.

NOTES

[*] The reader should keep in mind that this article deals only with questions surrounding the collection development of book materials. The unique problems associated with the acquisition of other media, such as transparencies of items in Soviet collections, has been excluded.

1) The important series *Istoriia iskusstva narodov SSSR* [History of the Art of the Peoples of the USSR) (Moscow: Izobrazitel'noe iskusstvo, 1971-1984) remains the most comprehensive work on the art history of the peoples living on the territory of the present-day USSR.

2) One of the few works dedicated to the question of émigré artists is : *On Russian Art* (New York: Association of Russian-American Scholars in the U.S.A., 1982) *Zapiski russkoi akademicheskoi grouppy v SShA* [Transactions of the Academic Group in the U.S.A., vol. 15 15]. Also known by the English title: *Transactions of the Association of Russian American Scholars in U.S.A.)*

3) Increasingly, collections situated outside of the capitals of Moscow and Leningrad are gaining in importance and interest. Many hold important research materials on arts in the provinces, as well as for the study of major artistic movements. In the case of Russian Futurist materials, for example, may important items were deaccessioned from the central libraries, into various provincial collections. On one such collection, see: *Sokrovishcha Irkutskogo khudoznestvennogo muzeia* [Treasure of the Irkutsk Art Museum] (Leningrad: Avrora, 1989).

4) Max Laserson *An Expert in the Service of the Soviet* (London: Ernest Been Ltd., 1929) published in German and English. Particularly noteworthy is the description of his activities as Deputy Chief of Currency Administration, in which capacity he oversaw the sorting and identification of valuables confiscated from private and museum collections, as well as those once in the possession of the Imperial family. On Laserson's activities, see R. Davis and E. Kasinec «Witness to the Crime: Two Little-Known Photographic Sources Relating to the Destruction of Antiquities in Soviet Russia During the 1920s,» *Journal of the History of Collections*, 1991 [forthcoming].

5) For an indication of the variety of materials acquired from the Soviet Government by major American libraries in the 1920s and 30s — more specifically, the Library of Congress, Harvard University, and The New York Public Library — see: E. Kasinec, R.H.Davis, Jr. «Russkaia akvarel' v N' in-Iorke, »*Hashe nasledie* (Our Heritage) VI: 40-41, 1989; R.H. Davis, Jr. «Russian and Soviet Illustrated Books and Photographs at The New York Public Library» *Solanus*, no.6: [87]-99, 1990; Ia.D. Tsajevych, «Two Rare Russian Printed Books in the Collections of the New York Public Library,» *Solanus* (London), no. 4: [76]-86, 1990; A. Sypula. «From the Shelves of the Winter Palace,» *Washington Post* Fed. 4, 1990; E. Kasinec and R. Davis, «the Grand Duke Viadimir Aleksandrovich and His Library,» *Journal of the History of Collections*, 2(2) : 135-142, 1990; and G. Pavlova «The Fate of the Imperial Public Libraries», Bulletin of Research in the Humanities 87(4): 358-403, 1986-1987.

For artefactual, as well as book materials in private collections, see: Lesley Parker. *Handbook of the Lillian Thomas Pratt Collection (of) Russian Imperial Jewels* (Richmond, [1960]); *Fine Russian Works of Art, Including the India Early Minshall Collection...* Auction catalog, Christie's New York, 12 April, 1988; and *The Paul M. Fekula Collection: A Catalogue* (New York, 1988). For a more general look at Soviet-Western commerce during this period, see also: Joseph Finder *Red Carpet* (New York: Holt, Rinehart and Winston, 1983).

On the sale of fine art treasures, see R.C.Williams, *Russian Art and American Money, 1900–1940* (Cambridge, Ma.: Harvard University Press, 1980); and P.N. Savitskii. *Razrushaiushchie svoiu rodinu (snos pamiatnikov iskusstva i rasprodazha muzeev SSSR)* [The Ruinators of their Country (the Destruction of Monuments of Art and the Museum Sales in the USSR] (Berlin, [1936]).

6) On. Mrs. Post's collection of Russian art and antiquities, see: Katrina V.H. Taylor *Russian Art at Hillwood* (Washington, DC: Hillwood Museum, 1987).

7) A series of pioneering Soviet articles on this subject was produced by A. Mosiakin entitled «Prodazha» [Sale], *Ogonek*, 1989, no. 6 (4-11 Feb.), 18-22; No. 7 (11-18 Feb.), 16-21; No. 8 (4-11 Mar.), 26-29.

8) In the past year alone, we have located three different catalogs: one of rare Russian books of imperial provenance, sold at auction in New York in 1934; one of Western literature and juvenalia, also from the palace libraries and the classroms of the imperial family, sold at auction in New York in 1932; and, most recently, a catalog of Western incunabula from Russian palace libraries offered by the London bookdealer William H. Robinson, Ltd.

9) One little-known guide for individuals using the Chadwyck- Healey microfiche set of Russian Futurist works is D. Carnevari's *Russian Futurism, 1910–1916: Poetry and Manifestoes* ([Cambridgeshire], England: Chadwyck-Healey, [1977?]).

10) Among the Western publishers which regularly publish works of of about Russian and Soviet art publications business are Yale University Press, Thames and Hudson (New York and London), Rizzoli, Abrams, Phaidon, and Pantheon.

11) The best overview to the complexities of Soviet current bibliography is provided by Thomas J. Whitby and Tanja Lorkovic's *Introduction to Soviet National Bibliography* (Littleton, CO.: Libraries Unlimited, 1979), particularly pp. 113-119.

The National Art Library and the USSR: connections and collections

Jan van der Wateren
National Art Library, Victoria and Albert Museum, London, United Kingdom

In these few notes I want to give you a flavour of the USSR and Russia as we experience it in the National Art Library, through its collections and through some practical connections.

1. The Collections

Although the Library is described as having the most extensive coverage of Russian, Soviet, East European and Byzantine art in the United Kingdom, the collections are patchy. We estimate that there are about 20,000 titles in the Library. They include many exhibition catalogues, organised geographically until 1987 and thus easily identifiable in a large library which does not use a classification system to shelve books. This is of importance for staff retrieving material for the public, and who are not familiar with the language or the script. Since 1987 better identification of the stock, and more especially, the introduction of automated catalogues has given us far better access to items in our holdings. Retrospective conversion of the million or so catalogue records of the collections prior to 1986 will help us discover even more about the different strengths, although we do already know that the Russian collection is especially rich in architectural and topographical works, archaeology and museum catalogues.

1.1. The serials

We hold circa 100 serials from the USSR, the tally for current and dead serial titles from Eastern Europe being over 350. However, these are all very rough estimates indeed. They are based on previous generations' estimates multiplied by our own very rough estimates of growth. It has only been in the last 3-5 years that we have been keeping statistics on any serious basis. We are in the process of installing an automated library system at the moment and by March 1992 we will have a full acquisitions, cataloguing and information retrieval system in place including a module for handling serials. When that is achieved we will be to provide more accurate information on the quantity of material which we are receiving and adding at present.

Russian periodicals taken by the Library include from the late 19th and early 20th century:

Ezhegodnik Imperatorskich Teatrov
Appolon

From the period to 1930 we hold copies of:

Strelets (The Archer)
Dokhlaya luna (First Journal of Russian Futurists, formerly literary company of Futurists "Gilea")

In 1983 we acquired an example of LEF: Zhurnal Levogo Fronta Iskusstv published in Moscow and Petrograd by Gosizdat (No. 2, April-May 1923). This edition was edited by Mayakovsky with illustrations by Rodchenko, Popova and Stepanova. The magazine was a principal forum for the discussion of art in post-revolutionary reconstruction. This issue, the second, provides a good example of Alexander Rodchenko's use of photography for graphic design purposes, combining photography with newspaper clippings based on Vetrov's experiments with silent movies.

Material other than from the Futurist/Constructivist/Suprematist vanguards include Mir Iskusstva.

1.2. The manuscripts

The Library has 8 manuscripts or collections of manuscripts relating to Russia.

The oldest manuscripts are the Letters of Peter I to Johann Wilhelm, Count Palatine of The Rhine, requesting protection for Israel Orii, Moscow, 23 Jan 1704 (MS.L.47-1984); the grant by Catherine II to Major-General Simeon Zorich of estates and 4 orders including those of St George and Aleksandr Nevskii, St Petersburg, 20 Dec. 1778 (MS.L.31-1983); the grant by Paul I confirming the starostvo of Bludno and Malich to Petr Pastukhov, the Tsar's former tutor, St Petersburg, 22 Feb 1797 (MS.L.133-1980).

Later manuscripts include: 'Drevnosti Kavkaza; by V.V. Vasil'ev, being an album with drawings and watercolours of Caucasian art and architecture, 1881-4 (MS.L.184-1980); letters and notes of

Mikhail Larionov and Natal'ya Gontcharova, 1912-27, with a typescript article by Larionov, 'A propos du Rayonnisme' (Box V.36.f, XII-XIII); 'Istoriya russkoi zhivopisi ot Petra I do nashego vremeni, 1700-1917' by Petr Petrovich Perstov, c.1920-6. This is a 2 volume typewritten manuscript of Perstov's History of Russian paintings 1700-1917 (MS.L.17-1981).

A volume of papers concerning the reproduction of art objects in Russia for the South Kensington Museum (now the Victoria and Albert Museum), includes; copies of official letters about the visit to Russia of Sir Philip Cunliffe Owen, Robert H. Soden Smith and Wilfred Cripps; a printed Summary of the List of Art Examples Selected as Suitable for Reproduction with manuscript notes; 32 letters from Alfred Maskell to Owen re art collections in Russia and re plaster casts of Russian works of art, 1880-81 (86.0.31).

We also have typescript translations into English by NW Wilson of 3 novels by Konstantin Georgievich Paustovskii based on the lives of the painters Orest Kiprenskii, Issac Levitan and Taras Shevchenko. No date (MS.L.47-1982).

1.3. Livres d'artistes

A part of the National Art Library's task is to look at and study the book as a vehicle and object. The earliest 20th century tradition in this field has been Livres d'artistes. The NAL holds a representative collection of these, which were exhibited in the From Manet to Hockney exhibition by the Library in 1984 in the V&A[1]. Of 160 or so items from Europe and America some 15 examples have Russian connections. Some are described overleaf.

In 1937 the NAL acquired: El Lissitsky — Suprematicheskii skaz pro dva kvadrata, V 6TI Postroikakh (Berlin: Verlag 'Skythen', 1922).

Between 1959 and 1962 a large number of items was added. In 1959 the Library acquired: Oskar Kokoschka — O Ewigkeit — du Donnerwort (Berlin: Fritz Gurlitt, Verlag, 1918), and in 1960: Wassily Kandinsky — Klänge (Munich: R Piper & Co, Verlag 1913). 1962 was a rich year when the Museum Acquired a group collection of material from Mikhail Larionov and Natal'ya Gontcharova's collection. I will refer to this later on. Also acquired in 1962: Oskar Kokoschka — Die Traeumenden Knaben (Vienna, 1908).

The next period of activity was between 1980 and when the Library actively expanded its Livre d'Artistes collection prior to the exhibition on artists books I have referred to earlier. They included in 1981 the 2nd edition of Dokhlaya luna (Moscow, Futuristui, 1914) which contains work by David Vladimir Burlyuk, and El Lissitsky's construction of Mayakovsky's Dlya Golosa [For reading out aloud] (Berlin: Gosizdat, 1923).

The Russian Futurist know as Iliazd was of course one of the main links between the Russian pre-Soviet avant-garde and that of Paris. He is critically important for his view and use of books — and an English librarian can feel the special affinity with his work on account of his predilection for Gill Sans. A smattering of works by Iliazd in the Library was reinforced by some significant acquisitions in 1980: the Library acquired the Boissière Traité de Ballet [sic] (1953) with a mis-en-page by Iliazd, the Pirosmanachvili 1914 (1972) with its Picasso engravings, but above all that roll-call of notable artists in the Poésies de Mots Inconnus of 1949 where Iliazd reclaimed the role of Russian Futurists in developing concrete poetry.

In 1983 we acquired Wassily Kandinsky's Xylographies (Paris: Editions des tendances nouvelles, 1990) and Nikolai Punin's Pervuii Tsikl Lektsii [First cycle of lectures] (Petrograd: 17th Government Printing Hose, 1920) with covers by Kazimir Malevich.

In 1984 followed Karl Kraus' Die Chinesische Maur (Leipzig: Kurt Wolff Verlag, 1914) with lithographic illustrations by Oskar Kokoschka, as well as an edition of La Fontaine's Fables (Paris: Tériade, 1952), with illustrations by Marc Chagal.

Since then we have not acquired any works of outstanding merit.

Notably absent in our collctions are Samizdat productions and books experimenting with the book format. This is most probably the result of not having any Russian expert on the staff to build the collection and to enthuse the management.

1.4. The Larionov/Gontcharova collection

A special word should be said about this collection. The V&A began to forge links with this couple of avant-garde Russian painters in 1926 when it began to put together an exibition on Theatre Designs by French and Russian artists. Larionov, the creator of Rayonnism, is today remembered not only for his neo-primitivist painting but also for his work with Diaghilev for the Ballets Russes during and immediately after the First World War. Natal'ya Sergeevna Gontcharova, his lifelong companion and wife, also designed for the Ballets Russes from 1913 onwards. One of her most celebrated stage sets was that produced for Rimsky-Korsakov's Le Coq d'Or (1918), whereas Larionov designed the decor and costumes for Soleil de Nuit (1915), Les Contes Russes (1917) and Renard (1922) amongst others.

The V&A exhibition included designs by Bakst, Derain, Braque, etc. After some hard penny-pinching bargaining the Museum bought from the material displayed, at half the requested price, the designs for Anna Pavlova's costumes in Le Coq d'Or, as well as designs by Larionov for Les Contes Russes, a ballet for which Liadov composed the music and which was first produced at the Teatro

Costanzi, Rome, in April 1917.

In 1961, shortly before Gontcharova's death in 1962, the Museum initiated negotiations to purchase a large part of Larionov and Gontcharova's extant collections. Well over 400 items were selected, relating to ballet, dance in general, the theatre and the opera, art, painting and popular art in Russia, France and Europe overall. It includes in addition to books journals, photographs, ballet designs, programmes, etc., most dating from 1914-1935. Among several periodicals which contain articles on Larionov are examples with photographs taken at the Olympic Games of 1936.

Work by the artists themselves include a sketch of Gontcharova, Diaghilev, Massine and Beppo; costume designs for Renard, for Kikimora in the Contes Russes, and costume designs for Chout (1921) and Soleil de Nuit. Gontcharova's work covers Le Coq d'Or, Les Noces (1923), based on Russian falk songs L'Oiseau de Feu (for the 1926 revival) as well as a sketchbook of textile designs, etc. Amongst the work of both artists is a large number of designs for exhibition catalogues and programme covers. The material from their library included many Russian works, pamphlets and treaties on choreography, brochures and artist's manifestos which would have been hard to obtain otherwise. Amongst the books was a very good copy of Konstantin Aristarkovich Bol'shakov's Le Futur which was confiscated by the police shortly after its publication in Moscow in 1913. Eight full page lithographs were produced, 4 each, by Gontcharova and Larionov. Another book was that of the poet (Alexander Nikolaevic Rubakin, Gorod: Stikhi (The city: poems), published in Paris in 1920 with illustrations by Gontcharova.

The Larionov-Gontcharova collection also included a number of works not by their own hands a representative example is an issue of Strelets. This magazine was founded and edited in 1915 by Alexander Belenson, and volume has 3 illustrations by Olga Rozanova. Other artists associated with the magazine were the avant-garde brothers David and Vladimir Burlyuk and Mayakovsky as well as the establishment in the form of Blok.

Acquisition of Larionov-Gontcharova materials continued after their deaths. After Larionov's death in 1964 Museum purchased from his second wife an oil by Gontcharova, as well as 4 sketches and 2 abstract compositions in ink and watercolour, and a sketchbook sheet from Larionov. In 1965 Miss Mary Chamot presented 3 paintings, 4 pencil sketches by Gontcharova and Larionov, to the Museum. In 1968 the Museum received as a gift from Larionov's widow 35 gouaches which made up his 1907-1909 suite Voyage au Turquie. The by now large and important Larionov-Gontcharova collection was yet further added to in the 1980s with the purchase of Sergei Pavlovich Bodrov's 1913 work Vertogradari Nad Lozami, published in Moscow by Lirika with drawings by Gontcharova. 1981 also saw the purchase of Valentin Parnack's L'art décoratif téâtral moderne published in Paris by Edition La Cible in 1919. It carried amongst its 17 plates 6 by Gontcharova and 10 by Larionov.

In 1983 the Library acquired Lord Berners' 1919 composition Trois moceaux pour piano à quatre mains with illustrations and cover by Larionov. Notably the transcriptions for piano duet from orchestral suites are dedicated to Larionov, Gontcharova and Eugene Goossens respectively.

The materials described in this section have transformed the V&A into an essential centre for the study of Russian theatre, and in particular, of these 2 artists.

1.5. General

The NAL also collected a large number of general documentary works on Russian art from the early 1850s onwards. In addition to gifts of objects from Alexander II, Emperor Of Russia in the 1860s, and plaster reproductions and other objects from the Commissions for Russia at the International Exhibition of 1862, the Paris Universal Exhibition of 1867 and the London International Exhibition of 1874, the Museum received from the Government of Russia between 1883 and 1887 some 56 volumes and pamphlets of the Early Russian Text Society, as well as some 20 photograps from the same Society.

By 1870, in the Universal Catalogue of Books on Art, the earliest book relating to Russia was Elizabeth I. Empress of Russia — An account of the august Ceremonial of the Coronation of Elizabeth I, Empress of all the Russians which took place on April 25, 1742 published in St Petersburg in 1744, others included The Costume of the Russian Empire published in London in 1803. Examples of ornamental coloured decorations from Greek and ancient Russian ornament and drawings. Museum catalogues included those of sculpture, drawings, prints, engravings, vases and antiquities from the Imperial Hermitage Museum in St Petersburg.

There is no easy way to chart progress in acquisition in the NAL for the best part of the 20th century. Acquisitions in the 1980s include some scarce Futurist and Constructivist works completing those in the Larionov Collection: Bol'shakov, Kruchenykh, Mayakovsky, and El Lissitsky and Rodchenko are also well represented in the collection of Jobbing Printing in the NAL, which contains a rich selection of printed ephemera and commercial printing. This includes work by Moholy-Nagy, Tschichold etc.

As part of its task of looking at the book as object, the NAL collects illustrated books extensively. Important illustrated editions of Russian classics (some published outside Russia) — Tolstoy, Dostoevsky, Gogol', Lermontov — are acquired selectively, as are non-Russian editions of the same authors.

A special category of illustrated books is that of Children's Books. The NAL has c.300 Russian children's books, the majority from the last 60 years, but including a few fine examples from the early 1990s (Bilibin's Skazki [Folktales] and other works). The Horton Collection, acquired in 1981, accounts for over 200 of the titles held, covering a 50-year period (1927-1976), and representing the many exotic styles and languages of the USSR from the Baltic to Central Asia. It includes examples of authors such as Chukovsky, Marshak and Tvardovsky, and artists such as Lebedev (for example, Tolstoy's Three bears) and Vasnetsov; a particularly interesting and colourful recent work is Paustovsky's Mergen and his friends, illustrated by Pavleishin (1924).

1.6. THE COLLECTING POLICY OF THE NAL

The NAL regularly receives art books from the USSR, many on exchange. Many of these are in the form of exhibition catalogues.

'Special' items including children's books, are acquired if deemed of significance for the art and practice of book production: interesting illustrations, binding , book construction, printing or design. A book might be acquired if it were the centre of a cause célèbre, or particularly evocative of a style of design or an artistic movement; or if contains the work of an artist or designer in which the Library has an interest. Children's books are collected from the point of view of Russian book illustration as a whole. Such items are normally purchased, being selected from catalogues; a few are received as gifts.

1.7. OTHER COLLECTIONS

I have tried to give you a very brief view of the NAL's collections on Russia. Of course, the coverage of Russian art and artefacts is accomplished across the Museum and there are large collections in various parts of the Museum. For instance, in the Prints, Drawings and Paintings Collection we hold a sketchbook with pencil drawings and landscapes by Natal'ya Gontcharova and loose papers including; draft of an article on art theories, c.1915-16; proofs of Aleksandr Rubakin's 'Gorod' (Paris, 1920); report to the Union of Russian Painters in Paris, c.1920; postcard from S Konovalov to Mikhail Larionov, 31 Oct 1919 (E.964-1961). And in the V&A's Theatre Museum we hold designs, press cuttings, posters and programmes of performances by the Ballets Russes and Diaghilev Ballet, 1909-29 and correspondence, music and libretti for Chauve Souris, c.1924-9. These are documentary collections germane to libraries; the scatter of such material throughout the Museum is due to the absence at the time of an overall acquisitions policy which defined accurately the specific destinations suitable to particular media. However, the Museum is in fact a 3-dimensional archive and all other collections: Ceramics and Glass, Far Eastern, Furniture and Woodwork, Indian and South East Asian, Metalwork, Prints Drawings and Paintings, Sculpture, and Textiles and Dress hold objects from Russian art and design history.

Contemporary Russian prints and examples of graphic design are also collected. In addition, the Prints, Drawings and Paintings Section of the V&A's Collection Department has recently intensified its steady acquisition of Russian posters (1917 to the present day), and now has well over 200. Most recently a large number of posters from the Gorbachev era has been acquired, again for an exhibition on this theme.

The Photographs Collection includes theatrical photographs from the Larionov Collection; topographical and architectural photographs (eg. a journey through Russia c.1900. by Peacock); and contemporary works. The Slide Library contains material on the art and architecture of the USSR and Eastern Europe.

2. THE CONNECTIONS

I have given you a very brief view of highlights in the documentary collections. I have already pointed out our programme of exchanges which includes some 12 USSR libraries. Four of the exchange libraries are Moscow: the State Lenin Library, the Pushkin Museum Library, the Museum of Moscow Kremlin Library and the State Historical Museum Library. In Leningrad we exchange with the Hermitage, Russian Museum and the State Public Libraries. Other city libraries are located in Baku, Kiev, Lithuania and Tiflis. Exchanges are an important source of publications for us. Unfortunately a period of stagnation cost us the confidence of our exchange partners, but since the mid-80s we have been able to implement an active exchange programme and we hope to extend our partnership in the USSR.

One of the problems that we have in the NAL, which reflects a basic position in our country, is our linguistic insularity. Of our 50 staff only 2 have a knowledge of Russian, and this is considered to be for us a healthy position since it doubles the number we had in 1990. The acquisition in 1961 of the Larionov collection was greatly expedited by Miss Camilla Grey's command of the Russian language and this should be a lesson for us. Previously we did not undertake the cataloguing of own material but subcontracted the cataloguing to the British Library, who delegated a couple of cataloguers once a month. However, we now catalogue our own aquisitions ourselves. For this we transliterate Cyrillic script according to Library of Congress standards.

We have recently tried to negotiate an exchange with a Russian museum with the intention of offering a project which would allow a Russian librarian to spend 3 months looking in depth at our Soviet holdings as part of the Conspectus we are conducting of our entire stock. Despite the fact that this particular exchange looks unlikely to go forward due to financial constraints we are improving our links with Russia. During 1990 we had the pleasure of receiving a group of curators from a number of Leningrad museums and demonstrating to them our new on-line public access catalogues. Two of the National Art Library's Senior staff are present at this conference and hope to make better contacts for future dialogue with Russia.

At the same time, through our links with the London University's School of Slavonic and East European Studies — and through renewed interest in ACOSEEM (the Advisory Committee of Slavonic and East European Material) we hope to strengthen our position of having probably the most extensive in the UK of Russian, Soviet, East European and Byzantine art.

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Libraries of Byelorussia Lend a Helping Hand to the Population in the Aesthetical Upbringing

L. Kiryukhina
Cheif of the art department of the Lenin National Library of the BSSR, Minsk, USSR

The processes of the restructuring and openness going on in the republic have roused keen interest for the history of Byelorussia, for the rich cultural heritage of the nation. In a large measure passing the law «On the languages in the Byelorussian SSR» proclaiming the Byelorussian language the state one contributed to it. The elaboration of the programme «Spadchyna» (Heritage) touching the renascence of the Byelorussian culture, the preservation and augmentation of its traditions both on the territory of the republic and over its bounds was a great event too.

During its history of many centuries standing the Byelorussian nation has made a valuable contribution to the world treasure of culture putting forward gifted personalities. The name of the outstanding humanist and enlightener E. Skorina, whose five hundredth anniversary was recently celebrated by the international community according to a decision of the UNESCO is the first in this row. The famous Vitebsk art school discovered Chagall, Malevich, Lisitskiy and others for the world. Creative work of Byelorussian masters in carving, of Slutsk weavers was notable for a high professional culture. In the beginning of the 20th centure the theatrical and musical arts reached a high level of the development.

Unfortunately during the last decades values were warped owing to the short-sighted policy on the field of culture, popular education. In many respects it led to the oblivion of the rich heritage and undoubtedly told on the general cultural level of the population. In this connection the task has arisen before organs and institutions of culture, of popular education, mass media, publishing houses, creative unions — to pool their efforts in the field of education and aesthetical upbringing for the preparation of a personality with a high general cultural potential capable of active creative work.

In the republic a programme of the aesthetical upbringing of the population has been worked out and is being accomplished. It is combined with the all-union one. Within the framework of the programme the approbation of a regional model has been taking place in the Vitebsk region for a whole year now. With the active participation of libraries the Byelorussian aesthetical association is being created.

Within the entire system of organisations and institutions exercising the aesthetical upbringing a special place is allotted to libraries. Just the libraries own such a mighty armoury of means of influence upon the man which a massif of the fiction, books about all kinds of arts, audiovisual materials and technical means represent.

The national library, being the main scientific centre in the field of the librarianship, directs activities of libraries concerning the aesthetical upbringing in the republic and analyses its results. It has prepared a number of aids for public libraries touching the organization of their work. These materials will be remade and republished owing to the appearance of new state standards of all kinds of documents. The library generalises and dissemenates the advanced experience on that score utilizing the system of the rise of skills of librarians and the possibilities of the specially organized republican base library (the township of Kopyl) whose technical equipment is the most satisfactory under the conditions of our republic. On the regional level departments of arts have already amassed a sizable experience and have their base libraries relative to the aesthetical upbringigng.

Owing to the purposeful efforts of libraries a solid stock base for the aesthetical upbringing has been created in the republic. So the stocks of the fiction and of the art literature amount to more than 47 million copied, the stocks of the pictorial material — to more than 195 thousand units, the stocks of the diamaterials — to more than 33 thousand units, the stocks of the printed music — to more than 592 thousand units. 617 records libraries with the stocks of 175 thousand sound records have been set up and it enable greater stock holder — the Lenin national library, the music library of the city of Minsk and some regional libraries — to render addititional paid services to users concerning the recording of musical compositions and subject collections on the magnetic tape.

A special attention is paid to the acquisition of publications about the national arts. Public libraries subscribe to such periodicals as «Mastststva Belarusi» (The arts of Byelorussua), «Spadchyna», «Arkhitektura i stroitelstvo Belorussii» (Architecture and construction of Byelorussia). In the last years encyclopaedias, reference books, guides and a good deal of albums about the history of the byelorussian arts on the whole and about their specific kinds have come out. These publications contain a rich scientific and factual material, they are well illustrated, extensive bibliographies accompany articles. They are of interest for both specialists and art amateurs.

Stocks for exchange at the national library and at six more regional libraries are sources of filling in gaps in the art holdings of the libraries of the republic. A well proportioned system of their redistribution has been worked out. While conducting big organisation work in this direction the library is engaged in the interpretation of the contents of the stocks by means of reference and publishing activities. The compilation of union catalogues reflecting art holdings too is the most important part of it. To begin with it is: Kniga Belarusi. 1517-1917: Zvodny katalog / Skl. G. Galenchanka i insh. Minsk: BelSE, 1986. 615 s., 12 l. il. The art department is setting about to compile «The union catalogue of sound records in records libraries of Byelorussia» which is unprecedented in the country. Its compilation sets in simultaneously with the creation of an automated data base on sound records in the territory.

Besides the national library puts out variegated bibliographies in the field of arts. The needs of the science and the interest for the culture of the republic determine their compilation. The retrospective scientific auxiliary indexes on the music and theatre are of special value. The bibliographic aids interpreting the national arts in all aspects are aimed at a wider reader circle.

The libraries work with different categories of readers: specialists, students and school boys, art amateurs. This determines diverse working forms: information, exhibitions, literary reviews, literary musical soirees, reception rooms, hours of music and poetry, premieres of books and gramophone records. The complex forms — book ten-day periods, book months, book festivals — have presented themselves in a good light. Jointly with clubs the libraries take part in the organisation of civil ceremonial rites «Consecrating into citizens», «Seeing-off to the Soviet army», «Ordaining into a trade». In the Brest region such a form as «Literary groups» has sprung up very popular with the youth side by side with clubs by interests and amateur societies.

For some time past a clear direction — assistance to schools — has been emerding. The interaction with schools with its previous episodic character is becoming more systematic. In 1986 the libraries of the republic joined in an experiment touching the organisation of the aesthetical education of school boys. They initiated the coordination of efforts on the part of all institutions of culture for the purpose of helping the schools. They used organisation principles and programmes approbated in the country and remade with account taken of the local conditions and possibilities aimed at the development of the abilities of pupils for being readers, spectators, listeners. Teachers and workers of institutions of culture did their utmost in order to arouse the activity of school boys and suggest certain moral conclusions. The cognitive material was illustrated by the audiovisual one in the lessons, many of them took place in libraries. And the main goal was attained: they succeeded in exciting curiosity among school boys. The experiment stirred up positive response and widened. The Minsk region works in the most creative way: additional posts of specialists in method have been established in base libraries, some financial issues have been solved. The experience showed how fruitful the concord between institutions of culture and popular education could be. The experiment came to a logic end: in the last years teaching the integrated course «Arts» has set in in secondary schools of Byelorussia from the 1st to the 2nd form.

While lending help to schools we had to analyse the volume and quality of art stocks once more. The availability of the audiovisual materials in the libraries was found to be scanty. During the last five year period their accretion diminished to 7 per cent and the share in the stocks of the public libraries make up only 0,05 per cent which is patently inadequate. Such a situation has arisen as a result of the absence of a system of the centralised acquisition of audiovisual materials for libraries. The creation of a a regional system of the centralised supply of the republican libraries with sound records (and later on perhaps with cinema and photographic documents) may be a way out of the given quandary. The art department of the national library had scrutinezed the idea and as a result the libraries and the republican house of sound recording came to a general agreement. In our opinion the republican system being in the making will permit the libraries not only to accomplish the selection of the issued sound records but to actively influence upon the formation of the state order of the national repertoire fulfilled by the all-union firm of gramophone sound recording «Melodiya» too.

Ensuring all activities concerning assisting the aesthetical upbringing in the republic depends on the completeness and quality of the stocks of the national library, for their formation the channels of the international book exchange are actively used. With satisfaction we note the growing number of parthers and the open international cooperation both in the policy and in the culture contributes to it in a large measure. Contacts with scientific universities' libraries, national libraries, world's greatest museums and art centres are established. In 1990 a connection was formed with Byelorussian emigres in particular with the institute of science and arts of Byelorussia (New York) and F. Skorina memorial library (London). They send many art publications to the national library of the BSSR. In the last years the gramophone record exchange accessions from the library of congress (the USA) have been especially valuable.

Taking account of the complicated social economical and ecological situation where Byelorussia has found itself and of the sizable restrictions of currency appropriations for building up library collections the contacts in the sphere of the international book exchange are especially important for us nowadays. For our part we possess an impressive exchange equivalent and hope for adequate possibilities of our partners for the sake of the development of the further cooperation on the national and international level.

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Collections, Scientific Activities, Literature Acquisition in the Library of the State Hermitage

E. I. Makarova
Chief of the research library of the state Hermitage, Leningrad, USSR

The history of the book collections of the Hermitage is a part of the formation of book treasures of Russia, it plays its special role in the development of the Russian culture from the 18th century up to now.

There is a sufficient number of published works both in the USSR and development of this unique library which is the greatest specialised book depository in the Soviet Union.

Catherine II laid the foundation of the library of the Hermitage by means of her "domestic" library, which she brought to the Winter palace after the coup d'état that raised her to the Russian throne in 1762.

The library of Catherine II had come into being before the museum and for a while it existed in parallels with the museum art collections, it played a role of paramount importance for the empress reflecting her interests and likings to a certain extent.

In the 18th century known book collections of Russian an foreign scientists and bibliophiles formed parts of this library: baron Korf, historian Shcherbatov, lieutenant-general Lanskoy, libraries of Diderot and Voltaire, of brothers Galiani, the geographic library of Büsching, the library of Peter III and of his father duke Karl-Friedrich von Holstein. Besides Catherine gathered Russian historical materials through her representatives abroad and in Russia: manuscripts, historical chronicles, annalistic books, genealogies of princely families and others. Attorneys of Catherine II in Paris and Berlin (Grimm, Nikolai, Zimmermann) bought in extensive book collections in different branches of science. By the intercession of Grimm the library of Diderot was acquired.

The empress favoured the great French enlighteners Diderot and Voltaire, was in extensive correspondence and did not miss the opportunity to purchase their unique libraries as a whole.

The library of Diderot (2904 books) was bought as far back as in his life-time. He was in straitened circumstances after the publication of the Encyclopaedia and the empress, buying the library, reserved it for the proprietor up to his death and appointed him "librarian of her Majesty" paying to him an annual salary.

Unfortunately the destiny of this collection formed tragically. After the death of the philosopher the library was brought to St. Petersburg and it ceased to exist already by the beginning of the 19th century as an independent collection. It was conjectured that a part of it had remained within the Hermitage whereas another part had been handed over to the public library and other depositories as duplicates.

The library of another great enlightener Voltaire (6760 books) was purchased by Catherine II after the death of the proprietor. It arrived at St. Petersburg accompanied by Vanier, librarian of Voltaire, together with a bust and the celebrated statue of Voltaire (by Houdon) completely intact even with numerous bookmarks used by the philosopher. The collection of Voltaire imparted a special value to the library of the Hermitage but it was well-nigh inaccessible for the readers since it was forbidden in the strictest manner to read or make excerpts from "Voltaire's library". An exception was made only in 1832 for Pushkin. With a personal permission of Nicholas I he was admitted to books of Voltaire to make excerpts while working on the history of Peter I.

By the middle of the nineties of the 18th century the period of shaping the book stock was over. The library was an independent structure, it coexisted on an equality with museum collections gathered by Catherine II too. Round the library collections of coins, gems, drawings, engravings kept shaping. For a long time they remained implements of the library and the librarians being appointed in succession kept both books and artistic collections simultaneously. By that time the book stock numbered 40 thousand copies. If assigned to science branches the books were arranged in the following order in the quantitative respect:

1) History.
2) Geography and topography.
3) Languages: dictionaries and philology.
4) Arts: architecture, music, dance.
5) Literature. Poems. Theatrical works. Novels.
6) Theology.
7) Literature in general.

8) Natural history.
9) Idolatry, emblems, mythology.

It ensues from this list that art books which became fundamental for the museum in the second half of the 19th century had taken the fourth place only. The entire stock was notable for its "encyclopaedic" character, which was a typical feature of many known collections of the 18th century. Afterwards this collection was called "The Imperial Hermitage foreign library" which was fixed in the exlibris in 1830.

Side by side with the afore described library there was yet another one — "The Russian library for the countries", founded by the empress. It was made up of the Russian duplicates of the Hermitage stock and of printed books incoming from all printing houses situated in Russia. In 1837 both libraries merged.

After the death of Catherine II the library of the Imperial Hermitage depended constantly on whimsies of the next masters of the Winter palace in spite of the fact that all Russian emperors after Catherine II used to have their own book collections in St. Petersburg and country residences. They were called "their imperial majesties' own libraries" and existed till 1917 side by side with the library of the Hermitage.

Under Paul I who succeeded Catherine II on the throne the library of the Hermitage remained inviolable in essence. But exhibiting the tendency to change everything done by his mother Paul I forbade the import of books in particular from France which created gaps in many periodicals.

Under Alexander I a radical reorganisation of the Hermitage set in which affected the book collection too. For the first time an attempt was made to draw the library nearer to the needs of the museum whose stock was not then in line with the new goal — to assist in the definition and study of works of art. For this purpose gaps were revealed and disposed of, many duplicates and publications at variance with the specialisation of the library were passed over to the public library, the general staff, the commercial school and others. Alexander I paid attention to the Hermitage library, so in 1814 he added his own collection to it, but he reserved the right to peruse the lists of the purchased publications which fettered the initiative of the keepers and deprived the foreign correspondents of the freedom of action.

During the reign of Nicholas I the library underwent a number of changes and adversities. In contradistinction to his predecessors the emperor put it on an even footing with his own book collections. He did not economize money purchasing publications for the Hermitage library abroad but he never forgot that he was paying "from his pocket" and he took to himself any books he liked from its stocks.

In that time the library felt sharply the lack of room for placing new additions. An inspection of the book holdings disclosed sizable losses because of the slipshod handling of books. Publications lent to readers were held by them for decades.

The fire in the Winter palace in 1837 caused large losses, the library of Paul I perished in this conflagration and as a result of the reconstruction of the Winter palace which set in after the fire the book collection lost its premises. A wandering of many years standing of the library over imperial palaces of St. Petersburg started.

In the forties of the 19th century building a new edifice "The Hermitage" began. It was destined especially for museum collections. Emperor Nicholas I put forward the idea of making the Hermitage library a part of the museum exposition.

By the fifties of the 19th century the library came back to the newly built up museum where eight splendidly decorated halls were allotted to it. And there was an enormous exhibition accommodated which was called "The book museum" at the desire of the emperor.

This "book museum" demonstrated the most interesting, rare and spectacular publications. After the example of the royal libraries of Paris and Berlin the book stocks were placed in sumptuous halls with marble incrustation, painted vaults, sculpture, vases, museum furniture. The most beautiful hall was given to manuscripts, the books of Voltaire received a separate hall too, in the same hall the statue of his great philosopher was situated. The exposition staggered with the splendour of the mounting but the books turned into the displays which one could only feast his eyes upon.

But the researchers of the Hermitage saw the aim of the museum library in the help to research and "The book museum" conformed in no measure to these demands the brilliant selection of books notwithstanding.

A court intrigue — the struggle between the chief of the Hermitage library Zhil and the director of the public library Korf — was conductive to big changes. Both were subordinates of the emperor and prone to win his benevolence to the interest of their libraries.

Korf was lucky to a greater extent and from the sixties of the 19th century on a huge transfer of the Hermitage books together with book cases and show cases to the public library started. In fact it meant crushing the Hermitage collection since limns, books of Voltaire, foreign periodicals and many other things were off. The rest of the book stocks was distributed to the subjects and it became tackle of the corresponding departments of the Hermitage. The library ceased to exist as a whole. Up to the nineties of the 19th century it was a pitiful sight as an art critic book collection because of the scarcity of new additions, a small amount of books, the absence of money for the maintenance of its staff.

The museum endeavoured to remedy its quandary by means of supplementing by books from the

Tsarskoe Selo armoury, of purchasing the magnificent collection of prince Golitsyn embracing very well preserved Aldine and Elzevir editions and many other rare publications. From 1904 the international book exchange began functioning, steady foreign connections were formed, the necessary scientific literature came in from abroad in exchange for publications about the Hermitage.

The old structure of the Hermitage library stopped contenting the museum (a historical library and several libraries attached to departments of the museum) and the necessity emerged to create a central library where all publications of interest for the entire museum could be concentrated. But the posterior events deferred the materialisation of this idea for several years.

Summing up the development of the library of Hermitage before the October revolution it can be said that having originated in the personal book collection of Catherine II it became a phenomenon unique in its composition very fast and gathered a numbered of illustrious Russian and foreign collections in its holdings. The library fulfilled its functions in the field of science and education in Russia, Hermitage researchers, university professors used it, members of the Russian academy of sciences took part in its work. Hermitage books arrived at different libraries and institutions of Russia, they nourished public libraries of St. Petersburg and Moscow, of the academy of sciences, the archeological commission and others.

After the October revolution in 1917 the activities of the museum and of its library paused for a while, they recommenced in 1919.

At first the library received its independent staff, thereupon — a separate edifice for placing its collections. It was a small palace from the Hermitage precinct built in the seventies of the 18th century after a design of the architect Velten — the so called "Favourite building".

Book collections from nationalized palaces, country-seats, royal and grand ducal mansions, schools, institutions started coming in and concentrating there. Among collections worty of note the following ones should be mentioned: the library of the former Stieglitz museum, of the palace of count Stroganov, of the grand duke Vladimir Alexandrovich, a part of the own library of Nicholas II with the famous collection of prince Lobanov-Rostovskiy (a former ambassador and foreign minister, a collector and connoisseur of the Russian history), which had been integrated in it. In the twenties the process of the collection, reorganisation, inventory of stocks was in pogress. By 1931 it ended in the creation of a card catalogue. From 1932 the regular international book exchange recommenced. Books from the personal libraries of Hermitage scientists — Schmidt, Waldhauer, Yaremich — came in as posthumous gifts.

Unfortunately the library did not escape the wave of sales which swept the best museums of the country. Together with masterpieces of painting excellent books, which had an enormous historic and artistic value, crossed the border.

But employees of the libraries endeavoured to atone for deficiencies by the use of purchase of old and rare books in second hand bookshops.

By 1940 the total amount of the books in the stocks numbered 157 thousand and the library became the main and greatest collection of art literature in the country.

From the very outset of the war the best part of the book collection was evacuated together with works of art to the Urals, to Sverdlovsk where a subsidiary of the Hermitage was set up. The part of the library stock which had stayed in Leningrad ensured scientific work of the museum that did not and during the entire blockade period. With the war being over the books and displays returned to Leningrad at once.

At present the scientific library of the Hermitage is retaining its standing of the leading art library of the country. Its stocks total 570 thousand volumes, about three quarters of its publications are in foreign languages, both European and Oriental ones; side by side with employees of the Hermitage scientists (historians, art critics, philologists), teachers from institutions of artistic higher learning, museum workers, restorers, architects, students have become its readers. Yearly 1500 persons subscribe to the library, 30 thousand visit it, about 600 thousand publications are lent, up to 8 thousand books and journals are purchased. The sources of new additions are: the centralised "Lenkniga" system, the international and union book exchange, currency procurements, the second hand book selling, book auctions, foreign and home gifts, purchase of private collections.

According to its structure the library consists of the central book storage with a reading room and with departments of the scientific processing of books and of seven departmental libraries attached to the scientific departments of the museum: the history of the West European art, the history of the Russian culture, the Antiquity, the Orient, numismatics, the primitive art, the former palace of prince Menshikov.

Virtually the departmental libraries are independent scientific book collections with their system of catalogues and unique stocks. Their collaborators are engaged in big bibliographic and consultation work. And the libraries of the archeological departments and of the department of numismatics are among the greatest specialized book depositories of the USSR. They have their own history originating as far back as in the last century.

The library possesses a study of rare books and manuscripts created after the model of the "book museum". 8 thousand rarities are amassed there. Among them there are Russian and European manuscripts, Aldine, Elzevier editions, Russian and Slavonic books published before 1708, albums with samples of cloths, crowning volumes, a collection of books by Vitruvius, fancy bindings, presentation imperial copies and many other things. The "Hermitagiana" - a collection of books about the Hermitage from the time of its foundation to nowadays - is worthy of note.

The scientific library takes part in the exposition activities of the museum both inside the country and abroad. Hermitage books have been exhibited in Prague, Copenhagen, Paris, Essen, in cities of the USA.

The staff of the entire library that is the central library and the subsidiaries consists of 36 persons. The library carries out the entire scientific processing of the books independently, it possesses a system of catalogues in Russian and foreign languages: alphabetical, subject catalogues, catalogues of periodicals, auctions, iconography, the Hermitagiana. It execieses an international book exchange with 30 countries, scientific catalogues of museum collections and of exhibitions, monographs and albums about painters, transactions and omnibus volumes, proceedings of conferences and symposia, periodicals come in form abroad. The most intense exchange in taking place with museums, libraries, art organisations in the USA, France, Germany, Great Britain.

The availability of a large exchange and duplicate stocks permits to supplement museum libraries of Leningrad and of its surbubs as well as museums ans scientific institutions of Siberia, the Ukraine, Moldova, the Balticum, Moscow, Stavropol with rare Hermitage scientific publications and modern foreign books about arts, architecture, archeology.

The Hermitage library plays a significant role in training young museum workers, art historians, archeologists, painters. Students of Moscow and Leningrad universities, of art institutes in the Balticum, the Ukraine, Byelorussia use its stocks. The most fundamental works about the foreign arts in the USSR and scientific catalogues are written with the help of the Hermitage book collection.

The library takes an active part in training librarian cadres, yearly students of the Krupskaya Leningrad institute of culture and employees form museum libraries work probation there.

In conclusion it can be stated that the significance of the Hermitage library in the development of the Russian culture is enormous and versatile, its richest collections have not lost until now its artistic and scientific value, its stocks reflect the process of the development of the cultural ties between Russia and the Western Europe, it gives a notion about the bibliophile activities in Russia beginning with the 18th century, it allows to trace back the development of the artistic taste in Russia, determine the range of its spiritual interests during three centuries, it elucidates the personal role of emperors, grand duces as well as the role of the palace administration in the cultural policy of the imperial Russia.

Nowadays one cannot overestimate the significance of the Hermitage library as both art and museum ones, having no match in the USSR, in whose stocks the richest collections of scientific catalogues of foreign art museums sent in from the whole world, of catalogues of auction sales and museum periodicals side by side with valuable home publications are represented.

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Tretyakov Gallery Scientific Library Collection

A.Bolotova
Chief of the research library of the All–Union museum association "The state Tretyakov gallery", Moscow, USSR

The Scientific library of State Tretjakov Gallery is one of the leargest and most unique libraries of the country. It is the only branch library on Moscow thoroughly and fully collecting literature on Russian pre-revolutionary and Soviet fine-arts, and the arts of foreign countries. Completeing, reference-bibliographic, scientific work of the library are closely connected to the aims of scientific research work of the library.

The scientific library is considered to be found on October 6-th 1899 when a painter I.S.Ostroukhov presented the Gallery with the property that belonged to P.M.Tretjakov. Tretjakov's library was comparatively small but rare by its content. It contained 358 volumes: books on iconography, several ancient manuscripts, on archeology, ancient Russian architecture, a series of general and monographic albums devoted to the creative activity of painters, the history of arts, reference literature, periodicals. The catalogue of his library appeared in 1905.

Nowadays the scientific library of the All-Union museum society "State Tretjakov Gallery" contains 354 volumes. Among them books on Russian pre-revolutionary and Soviet fine arts and adjacent sciences: history, philosophy, aesthetics, history of literature, theatre, belles-lettres. There are nearly 800 thousand press-cuttings on arts from variuos pre-revolutionary and native newspapers and magazines, a great number of invitation cards and exhibition placards.

How does the library replenish its book collection? Its history may be devided into several periods: pre-revolutionary years, the period of October Revolution till 1929, from 1929 till Great Patriotic War and post-war period. The library got only 12 volumes (4 titles) after the death of P.M.Tretjakov (December 1898) and till the publication of catalogue in 1905. In 1907 the City Municipals alloted a little sum of 800 roubles per year for replenishment of collection. Besides one can't speak seriously about full completing at that time. Due to the donation the library got only 173 books from 1907 till 1914.

Painters I.S.Ostrouhov and I.E.Grabar paid great attention to the replenishment of funds, they headed the Gallery during different periods.

On June 3, 1918 Moscow city Gallery of Tretjakov brothers was nationalized. Beginning from that time the library was intensively replenishing due to the state budget and to the grants.

In the early 1920s a number of little museums and country estates had been liquidated and the library was replenished with their books. More than 200 books were given to the library from the country estates "Znamenskoe", "Soukhanovo", nearly 800 books — from Proletarian museums. Among them there were valuable albums, exhibition catalogues, books on history. Such rare editions were got as "The true notion of buildings and the garden of one of the pleasure houses that is called Kuskovo hamlet..." (M., 1786), Russia's family register published by Peter Dolgorukij (parts 1-4. Spb., 1854-1857), exhibition catalogues "The world of arts", "Free activity"...

A lot of books were presented to the library by painters E.M.Khrouslov, M.V.Dobuzhinskij, N.N.Goncharova, M.Shagal, P.P.Konchalovskij, E.D.Kandinskij, I.E.Grabar... Many books possess grantors' signatures, hence they are valuable. They are being revealed nowadays and the card index is being made to from the basis of a future scientific work. The fund of such books is being filled constanty.

The People's Comissariat on Enlightenment permitted the library on January 9, 1924 to buy books for hard currency, the sum was 100 golden roubles and in 1925 the sum was 300 golden roubles. This rihgt of book purchase is real till our days.

There were 11,500 volumes by 1929. After the death of the painter I.S.Ostroukhov the library got 10,321 volume. Books were presented to the State Library named after Lenin, Academy of Architecture, International Book. There still preserved an alphabetical index of I.S.Ostrouhov's library, printed in 1914 in Moscow and finished by hand. Ostrouhov's library contained rare books on ancient Russian painting, history, reference books, illustrated fiction, a large collection of foreign books on arts.

In December 1930 the library got a collection of books that belonged to the art critic M.S.Bazikin (4849) vilumes). There still preserved inventories of that library, giving notion about its content and the sources. There were a lot of books with the autographs of donators. Among them P.I.Neradovskij, P.M.Dulskij, N.I.Tutchev etc.

There are rare books presented by a painter M.V.Matushin. Among them K.Malevich "From cubism to suprematism" (Pg., 1916) with autographs, A.Kruchenykh "A dusk's nest" with drawings by O.Rosanova etc.

In 1931 the library begings replenishing through collector of scientific libraries and receives one compulsory copy of books on arts.

Besides centralized book supply the library got books from libraries and museums in 1930s: from the State Library named after Lenin — 376 books, from Museum of painting culture — 330 books. Among them: Khlebnikov V. "Zangezi" (M., 1922), Malevich K. "The Gid is not thrawn out" (Vitebsk, 1922), exhibition catalogues of Easel painting society, AHRR, "Blue Rose".

These new books made the nucleus of the scientific library of the gallery. Namely from that time one may speek about the library as about one of the largest branch book collections on fine arts and as a rare one.

By 1931 there were nearly 30 thousand volumes in the library, before the Great Patriotic War there more than 45 thousand volumes. When the war began all valuable and rare books were transported to Novosibirsk, they were returned in 1944.

After the war the library continues completing through collector of scientific libraries, international and inner bookexchange, book purchase and donations.

By 1956 when the library selebrated its 100 anniversary there were 70 thousand books and magazines.

In 1970s an art critic A.N.Svirin presented the library with 1500 books and magazines, the library was presented with books of V.V.Rozhdestvenskij, with a part of collection from library of professor A.A.Sidorov.

The library is proud with its small collection of ancient manuscripts: "The Pskov printing house charter" XI-XII centuries — the only warming up to singing of that time prominent because of first drawing of domestic life in its margins, "Galits-Volyn gospel" of XIII century with miniatures by evangelists, the Goduniv Psalter of 1594 with well-preserved miniatures, a Gospel of XV cent. etc. Using this collection of manuscripts the researchers of ancient Russian department and of scintific library wrote an album-catalogue "Ancient Russian miniature in the collection of State Tretjakov Gallery" that is not still published. This book contains several old-believers' manuscripts of XVII-XVIII centuries that haven't been yet published and mostly unknown because nobody read them. This edition is supposed to include more than 300 illustrations.

The library makes propaganda of book publishing through book exchange, creates variuos reference books of card index, organizes exhibitions in gallery and library.

The inner and foreign book exchange began in the library at the beginning of 1920s. We started book exchange with State Russian Museum and Pushkin House in Leningrad and Museum of Contemporary West arts in Moscow, All-Ukrainian historical museum named after T.G.Shevchenko e.t.c. Beginning from the second half of 1920 the library begins a wide international book exchange with Belgium fine arts museum, Lubljana people museum, Stockholm national museum, Berlin Academy of art, British museum in London, Metropolitan museum in New-York, Museum of arts in Tokyo. It's a pity that this wide scale exchange that lasted even during post-war period nearly stopped in 1970s. Political situation in the country influenced that exchange. Till our days we can't restore exchange with the USA, England, Canada, Germany museum and namely with Metropolitan Museum, Ottava national gallery, Hokkaido modern arts museum in Sapporo, National gallery of modern art in Rome e.t.c.

Nowadays we have a book exchange with 66 foreign societies and 46 Soviet museums. We make exchange with Templ gallery in London, the Royla museum in Brussels, the Anthverpen fine arts museum, State arts museum in Copenhagen, Prado museum in Madrid, City museum in Amsterdam, National gallery in Oslo, Arts museum in Hannover, the library of arts museums in Keln, Atheneum museum in Helsinki and others.

The scientific library may send in exchange albums, monographs, Tretjakov gallery exhibitions and collections catalogues and reference books as well. And we would like to receive reference books, art encyclopedia and any kind of literature about Russian artists published abroad. It's a pity we are almost deprived of a possibility to buy books abroad because we get a little sum of hard currency, it's possible to buy just 10-12 books per year. That's why the book exchange is an important sourse of enlargening our collection. And we'll be happy to improve our relations after this meeting.

Our exhibitions in the Gallery and library propagate literature greately. Exhibitions are held according to the plan of exhibiting work of the gallery.

In 1976 we held an exhibition by those people who work at the Tretjakov Gallery. In 1981 when gallery selebrated its 125 anniversary there held a documentary exhibition of the material of scientific library and manuscripts department. Last 5 years the library participated in such exhibitions as one devoted to A.S.Pushkin, Art and Revolution, Art of 20s and 30s, exhibitions devoted to V.Kandinskij, K.Malevich, E.Lisitskij, V.Vasnetsov. We organize 10-12 exhibitions per year inside our library, one large exhibition of second-hand bookshop literature, of books bought for hard currency and book exchange. Besides all this we prepare literature for the excursion of these exhibitions.

Our reference-bibliographic apparatus propagate books much, these are catalogues and card index created by tedious work of our employes.

The basis of book collection is a general catalogue creation of which began in 1929. Almost at that time there began the creation of a subject catalogue, led bb experienced bibliographers.

In 1930 we bought at art critic Adarukov a card index of artists and it was the beginning of reference card index. It includes articles expressions, recollections about artists in books, magazines. This card indexis well known among Soviet and foreign art critics. It reflects literature on Soviet painters of pre-revolutionary period and Soviet period.

In 1960 there began the card index "Participants of art exhibitions". It's being created not only by gallery workers but by art critics of union republics as well. This card index is unique by its choice of material. It reflects fully the participation of artists in Soviet and foregn exhibitions. It includes some biographic data. We described exhibitions catalogues, used archives and book collections of the largest libraries of Moscow and Leningrad, of the Central state archive of literature and arts, of Union of artists of USSR and others.

There are card indexi as well: the card index of reproductions, of illustrators, articles alphabet card index, exhibitions systematic catalogue.

To make a card index of illustrations we describe books on art, albums, exhibitions catalogue, periodicals. Some editions we do not describe because it,s not difficult to find reproductions using an alphabet catalogue. This card index was began during post-war period and at that time we described almost all pre-revolutionary albums on art. It's difficult to overestimate its role during atribution work, examination, when taking photographs of reproductions, it's helpfull when we give bibliographic data.

The illustrators card index is made on the basis of the cards of the all-Union book chamber for fiction and literature for children. The literature is situated according to the alphabet of the names of illustrators, that makes easy its usage. It is widely used by specialists who work in graphics.

The systematic exhibitions card index is made on the basis of catalogues that are in the library, that's why it is not universal; Printed exhibition catalogues are difficult to find in the alphabetical catalogue, that's why we invented our own system. You may find any exhibition catalogue according to the year of edition, the place of exhibition, museum-organizer etc. These exhibitions are differentiated according to different arts, name, the international exhibitions are described separately, as well as world exhibitions, all-Union, personal.

Thus our catalogue system is organized in such a way that it would satisfy our clients. This reference apparatus is created on the basis of taking into considiretion the wishes of our readers.

We create and publish reference books on the material of our card index. Beginning from 1960s art critics who work at the library publish a reference book "Exhibitions of Soviet painting", 5 volumes are already published, it is the period from 1917 till 1958. We prepare to printing the volume VI of 1959-1968. The reference book has the chronological sequence of material, Moscow and Leningrad is put at the beginning, exhibitions are situated in the alphabet of Russia's towns, then in the alphabet of republics. There is also a material on our exhibitins abroad. The book contains alphabetical index of artists and geographical names.

We regard it to continue till 1973, because "The chronicle of artistic life" was first published at that time and one may find exhibitions as well.

Besides the reference book of general exhibitions we are preparing "Personages of Soviet painting exhibitions", where one may find group exhibitions as well. It is supposed to publish 4 volums. The first volume is published (1917-1947). Besides fact data this publication contains reproductions interiors, placards, self-portraits, covers.

In 1952 we published "Association of movable exhibitions" in 2 volumes. This reference book includes information about Moscow and Leningrad exhibitions. The authors G.Burova, O.Gaponova, V.Rumjantseva worked hard to reveal not only Association's catalogue and their discription but full bibliography of information and opinions about exhibitions in periodicals of that time as well. We continued this work. We looked through all peripheric catalogues of mobile exhibitions and periodicals of that period. We finished this work by 1980 but didn't manage to publish it.

Our librarians participate in creation of books' bibliographies ("October revolution first years agitation-mass art's" catalogue, 1967; monographic album by S.Konenkov, 1978; album by A.Deineka, 1982; V.Vasnetsov exhibition's catalogue, 1990, E.Lisitstij exhibition's catalogue, 1990).

Every year 5-6 thosand readers visit the gallery's library, they read nearly 60 thousand books. 17 librarians lead a scientific-research work besides completing, exhibiting. We serve our Soviet and foreign art critics, artists, teachers, Moscow State University students-historians.

The library has its branch on Krymskaja embakment in State picture gallery of UUSR, where we suppose in future to organize a small reading-hall. This library is being completed mainly with books on Soviet painting because we plan to locate there the collection of Soviet painting of Tretjakov gallery.

Nowadays the libraries prepares a book collection to insertion into computer system, but that will be in future.

From Keeping to Knowledge.
Theatre Library in Changing World

L. V. Krotkova
Chief librarian, State central theatre library, Moscow, USSR

Short History of the Library.

From the very beginning our library had the applied character. Attached to the theatre college of the Maly Theatre, it was destined to ensure work on current repertoire and teaching process.

It was opened on May 24, 1922 in the premises of the former theatre hall in Pushechnaya street, where some of the art workers of the Maly Theatre gathered. Not only producers, actors and students went often to the library, but artists, stage-managers, property-men, costumiers as well.

A great interest to the Russian and West classical drama art, to its new vision, concern for high quality staging of the Theatre Library met the requirements of Moscow theatres. Such art masters as K.S. Stanislavsky, M. I. Babanova, J. A. Zavadsky, I. M. Moskvin, N. P. Okhlopkov, A. K. Tarasova, N. P. Khmelev, I. M. Smoktunovsky, O. N. Ephremov and theatre artists M. P. Bobyshov, P. V. Wiliams, E. E. Lansere, V. Y.Levental, B. A. Messerer worked within the precincts of the library.

From the moment of its creation up to nowadays many famous workers of culture (A. A. Fomin, the first director of the library, V. I. Tunkel, etc.) were managers of the library. The personnel of the library kept carefully traditions of the library as only one in Moscow specialized cenre of information on theatre.

During the Great Patriotic War the library was information centre for front theatres and ensembles, Sovinformbureau workers, variety workers, etc.

After the War in 1948 the first floor of house 8 in Pushkin-street was given to the library.

This house is one of the most valuable monuments of architecture of the end of the 18-th century. It was built in 1793 according to the great Russian architect M.F.Kazakov's drowings. In 1829 Imperial theatres board bought it from Count F.Tolstoy for its theatre school. Later on it became the Board of the Imperial Theatres where L.N.Tolstoy, read his drama "The Power of the Dark" for the 1st time. After the Revolution there was the Board of Moscow Academic Theatres and editorial office of the "Theatre" magazine in it.

Stocks of the Library.

The stocks of the library include editions on all the problems of the theatre art, music, cinematography, art radio and TV, fine and applied arts, belles-lettres (including the unique collection of the Russian repertoire), books on literary criticism, ethnography, bibliographical and reference editions. The personnel of the library keeps gathering magazines and various editions covering everything new in this fields of art. There are special stocks of newspaper articles about theatre, theatre programmes and graphic materials.

Originally the basic of the stocks were composed of the most valuable old collections: the library of the Society of the Russian drama writers, books from the Theatrical Department of the State Academy of Artistic Sciences, the large stock of lithographed plays (the so-called "Rassokhin's Library"), private collections of A.P.Lensky, S.S.Mokulsky, S.S.Ignatov, Y.I.Slonimsky, N.D.Volkov, M.N. and A.P.Gazievs. Those collections ceased being just collections. They did not disappear in the stocks, but became an important part of it.

Today the State Central Theatre Library possesses the largest storage of literature on theatre and arts, closely connected with it and the stocks of books, magazines, graphic materials, newspaper clippings and theatre programmes encounts up to 1, 8 mln pieces.

The first postrevolutionary editions about theatre (1917- 1925) are the pride of the library.Here are only some of them:

Керженцев В. "Революция и театр". (М., Денница, 1918).

Худяков С.Н. "История танцев". (Пг., 1918; rare copy).

Коонен А. "Кто, что, когда в Московском Камерном театре. 1914- 1924 гг. (М., 1924, with the author's autograph).

There books about theatre dated by the middle of the 18th century in the library's stocks:

"Театральный собеседник, или Собрание весёлых и занимательных анекдотов, острых изречений, странных обычаев, касающихся до театра и проч., издано в пользу и удовольствие любителей театра". (М., 1804)

"Русская талия, подарок любителям и любительницам отечественного театра на 1825 год", изд. Ф.Булгарин. (Спб., 1824).

Practically the whole repertoire of Russian theatre is represented. The basic of this stock consists of valuable prerevolutionary collections — considerable collection of drama of the 18th- the first half of the 19th centuries from the State Book Stocks, the library of the Society of Russian Drama Writers, a part of the Moscow Maly Theatre's Library, E.S.Rassokhina's library of plays, a part of the library of the Moscow Society of drama writers and composers, Y.Kamsky and P.A.Sokolov-Zhamson's libraries.

Among rare books of the 18th century there are works by A.P. Sumarokov, D.I.Phonvisin, Y.B.Knyazhnin, I.A.Krylov, P.A. Plavilschikov, M.M.Kheraskov, many of which were published in their life-time; collection of vaudevilles by P.A.Karatygin, D.T.Lensky, F.A.Kony, etc.

Soviet drama is represented by various books beginning with rare copies of plays, published in 1917- 1922 up to nowadays. There are quite a lot of books, translated in Russian, representing foreign drama.

There are librettoes of operas, ballets and operettas in Russian and foreign languages in the stocks of the library.

Drama of Soviet and autonomous republics is represented by translations into Russian.

The library has a very interesting collection of magazines. There are a lot of theatre magazines of the end of the 19th century, the beginning of the 20th century and Soviet period of time in it as well as magazines describing activity of provincial theatres such as "Repertoire and Pantheon", "Interval", "Prompter", "Theatre Library", "Actor", etc.

In the stocks of the library there are literary-public and literary artistic journals of the 18-19th centuries paying much attention to drama and theatre problems: "Telescope" (1831 -1836), "Home Notes", "Contemporary", "World Illustration", "Field"; satirical magazines "Alarm-clock", "Wasp", "Dragon-fly", "Man of Motley", etc.

Modern soviet magazines fill up regularly the library's stocks — 188 magazines every year, among them there are a lot of fashion journals, which are helpfull to the artists. Every year the library buys more than 100 foreign magazines.

The Rare Books Department keeps the rarest and most valuable editions. There are more than 15 thousand copies of them.

One of the creators of the library professor P.P.Pashkov was the initiator of the collection of the illustrative materials, which contains ancient and modern engravings, litographs, fashion pictures, photographs, reproductions.

The total amount of the engravings, kept in the library, is 40 thousand copies, including engravings on Russian topics by G.G. Geisler and D.A.Atkinson, who travelled around Russia in 1780-1790 and painted from life; the rare series of splendid engravings "Peoples of Russia of 1805-1806" by Y.M.Korneev. Litographs by L.A.Belousov for the famous work by A.V.Viskovatov are of great interest too.

The conciderable part of this stock is of high artistic value which let us use them in our exhibiting and publishing work.

The postcards collection contains pictures of different cities, especially of ancient Moscow which held to reproduce its appearences. There are a lot of pictures of folk costumes and costumes of peoples of Russia, living scenes from the people's life.

The major part of the stock consists of photoalbums, made by the library's personnel for certain plays. Many performances of Moscow and provincial theatres, films and TV shows were staged with the help of the materials of our library.

There is one more stock in the library: there are about 1 mln newspaper materials dated from the middle of the 30s of the 20th century (there are about 100 thousand copies of theatre programmes).

Since 1988 the library has been creating the stock of videorecordings of the best home and foreign performances, films, variety and circus programmes, etc. The absence of such a stock in the country cause great losses in culture and art, besides, gathering of videomaterials will help in the process of teaching in colleges.

The library's stocks are being filled up with published and audiovisual materials and are being added by means of book exchange (the library tries to develop the international book exchange, it has 95 partners in 30 countries).

Reference - bibliographical Bodies.

All the rich materials of the library are reflected in its reference - bibliographical bodies, which help to answer reader's questions. Originally it was destined to help readers.

We have a special system of catalogues and card indexes, closely connected and supplementing each other. Thtere are both traditional (such as alphabetical and systematical) and original.

Bibliographical description corresponds to international description standarts.

Systematic catalogue was made in accordance with a certain system of the librarian-bibliographic classification, the working variant of which was worked out by the workers of our library.

The subject catalogue, which reflects the contents of the book and gives its analysis is the unique reference materials of the library.

The card indexes reflect not only the stocks of the SCTL, but include data on literature, which was published on the topic in Russian and foreign languades but which is not in the library. There are more than 50 card indexes, covering all the stocks —books, magazines, graphic materials, newspaper clippings and theatre programmes. Each of them has its own principle of selecting material —alphabetical, systematical, subject, chronological. The library has the unique, the only one in the U.S.S.R. bibliographical card index "World meaning of the Russian and Soviet theatre and drama". It contains descriptions of performances according to works by writers, staged abroad beginning from the 2nd half of the 18th century.

Card indexes include books on drama theory and history and published texts of plays. The repertoire card indexes describe soviet publications by home and foreign authors, plays in foreign languages, vaudevilles, etc.

Factographical card indexes are of great importance as well for they give information about the date of the first night and producer's group.

Editorial and newspaper workers often use the card indexes which cover all honorary titles and bonuses which were given to this or that worker of art; card indexes on works by producers, artists, playwriters, choreographers, composers.

All in all we perform multiaspect processing of materials.

Bibliographical Service.

The premises of the library include small reading halls, where only about 85 readers can work at the same time, subscription department, or lending library, and 2 branches, which serve workers of the USSR Ministry of Culture and the Refresher Course for workers of culture skills.

The library sends literature to another libraries for temporary usage (our library is a member of the system of interlibrary subscription of the country) and to the country's theatres (literature, bibliographical lists, illustrative materials for their new performances).

The library ensures 100 thousand visits, lending of 450 thousand books, magazines, etc., 100 thousand xerox copies every year.

As a rule, enquiries have a complex character and need multiaspect answer, analysis, sources, wide usage of published and illustrative materials, as well as audio-visual materials.

We make more than 20 thousand references during one year, many of which could be refferred to reseatch works.

We teach students to use the reference materials of the library in their studies.

Scientific-bibliographical work.

The "Annual of plays",published since 1973, where annotations to different plays are given, is very popular among those who take an active part in amateur art activities.

The library publishes scientific-auxiliary indexes to help soviet specialists in theatre in their work. Some of them are: the 3-volumed index of bibliographical and reference materials "Russian Soviet Drama Theatre. 1917-1973", 4-volumed bibliographical index "Soviet Theatre for Children. 1918-1973", "The USSR Bolshoy Theatre. 1955-1975", "Moscow Theatre "Sovremennik", "Mayakovsky Theatre", "Theatre of Drama and Comedy in Taganka", "Contents of the "Theatre" Magazine. 1937-1977", the sequel of which, covering the period of 1978-1988, will be published in 1991.

In its publishing activity the library has tense connections with other organizations, for example, together with "Informculture" of the Lenin State Library it makes up the "Theatre" monthly; together with other libraries it took part in the publishing of the "History of the prerevolutionary Russia in diaries and memories" edition.

Unfortunately, the major part of indexes has small circulation (about 500 copies) and they are bibliographical rarety.

Exhibitions.

To keep up interest to national traditions our library organizes expositions of books and illustrative materials on art in its building, in theatres, exhibition halls, cultural centres in the USSR and abroad.

They are: "The Costume of Peoples of Russia", "The Original Photography of the 19th Century", "Decorative art and Costume in Theatre and Cinematography", "Churches of Moscow", "Theatrical Pictures of Moscow". These expositions include not only materials from the library (books, engravings, photographs), but works by the professional artists and students of art colleges (painting, drawings, costumes, etc)

The library publishes advertising posters, catalogues of exhibitions, leaflets.

Since 1990 the library has become a member of the International Association of Theatre Museums and Theatre Libraries (SIBMAS). In September, 1990 the library took part in its regular session and represented the report about the methods of serving specialists of creative professions. The library is planning to participate in the next (1992) session in Lisbon and to represent the bibliographical index "Russian Soviet Drama Theatre. 1917-1927", some expositions and a leaflet.

The SCTL is not only a depository of books and other materials about Russian and Soviet theatre, but of Traditions of Russian theatre and Russian culture. That's why we hope that the work of our library is of great interest not only to our readers, but to the respected audience.

Fine Arts Data and Data Banks in the USSR

D. G. Pertsev
Head of the Automatic Data Processing Department, All–Union Museum Association
"State Tretyakov Gallery", Moscow, USSR

In this country data banks in the field of fine arts are being created under the coordination plan of the Ministry of Culture of the USSR and ministries of union republics. In a number of large museums of the country, e. g. in the Hermitage and in the Russian Museum, this work has begun more than ten years ago. Before 1987 it was done on leasehold hardware — large computers using various standard software and application programmes. E. g. in the Russian Museum 3 data bases have been created for classical painting, soviet painting and soviet graphics. The 3 data bases, realized on different computers, were all incompatible. It was only last year that work was started to bring them to a single format on personal computer (PC). However, PC which became widely spread in the last three years, enforced the effect of babylonization. This process, being the manifestation of the law of entropy, is characteristic for the entire world and much effort is needed to resist it.

What should be the direction of application of these efforts, i. e. what is to be done for data bases not to turn into electronic card files accessible only for their owners, but storing hundreds of thousands of descriptions and images to give a new momentum for development not only of the respective fields of science but of the culture in general as well? Besides these strategic questions we shall consider the current situation in the computerization of fine arts museums, we'll so to say examine the starting conditions of the process we are interested in.

Let's consider problems of integration of large systems concerning different fields of culture. E. g. the integration of large library and museum systems.

Data bases and data banks in field of fine arts are being created under the "ISO" automatic information system project consisting of two parts. The first part of the project deals with national fine arts and the second one — with the foreign arts.

The Tretyakov gallery is the head organization for the creation of data bank for national painting, sculpture and graphics.

Under the contract with "Olivetti" firm the Tretyakov gallery has at its disposal modern hardware capable of supporting the creation and management of the central data base of descriptions (more than one hundred characteristics). The data base allows storage of about 600 thousand descriptions and working with them in online mode. The DB of descriptions is connected with the DB of images capable of working with 200 thousand colour images.

Bellow we give a detailed description of hardware which makes it possible for us to cope with aforementioned tasks. The system works in a net mode using a coaxial inside the building of the Tretyakov gallery enabling the user to call the image from the central DB on his own terminal. Telephone channels are used for remote terminals. Minicomputer SP-644 (PDP-11/44 type, USA) is used as a mainframe:

- RAM 4 Mb;
- 4 hard disk drives 134 Mb each;
- 3 hard disk drives with removable disks 256 Mb each
- 2 tapes drives;
- additional equipment for local net ETHERNET (DELUA controller, transceiver and a cable);
- additional hardware for image file storage (direct access optical disk library on 56 2Gb optical disks).

M-290 ("Olivetti") PC AT computers are used as net terminals:

- processor 80286, coprocessor 80287, 2Mb RAM;
- colour monitor with a VGA adapter;
- 3.5" floppy disk drive — 1.44 Mb;
- hard disk drive — 100Mb;
- streaming tape drive — 40Mb;
- additional image visualization hardware:TARGA-16 graphical adapter and a colour monitor;
- additional local net ETHERNET hardware (3-COM card, tranceiver and a cable).

[Eventually more advanced PC M-300 with a 386 processor might be used instead of M-290]

To avoid overloading the mainframe computer the user will be able to have on his own PC a local DB corresponding to the field of his professional interests (e.g."Pre-revolutionary graphics from the State Tretyakov gallery funds"). Only when he has to come out of the local DB does he call the central DB. The storage amount of the central DB will exceed half a million descriptions, it will include all national painting, sculpture and part of original graphics from all museums of the country.

As for description characteristics, the central DB will allow to find any data in the most detailed catalogues.

Since there are substantially less authors than there are works of art the authors have been grouped into a separate DB. Description structure includes 21 characteristics.

DB of images. Videoframe of the "ISO" automated information system.

For a number of organizational and purely technical reasons we are planning creation and management of several video-DBs with different technical characteristics and functions.

Digital DB for visualization of images in "ISO" automated information system. Input of images in studio is made with a TV-camera, outside the studio with a "Camcorder" with temporary storage of image on a videorecorder in the S-VHS standard. Input is made both from originals and from secondary sources. TARGA-16 graphical adapter (512x480 pixels, 32 thousand colours) and Juke-box type optical disk drive with 56 1 or 2 Gb WORM optical disks are used. Retrieval time in a full DB (more than 200 thousand images) is 30 to 40 seconds which is inconvenient in online mode.

Therefore along with accumalation of images in the DB we plan to use in online mode an analogous system of visualization with a Laser Disk format videoplayer capable of storing 100 thousand images. Visualization time for an image on one side of a disk is 1 to 2 seconds. The device is cheap and reliable, its drawback is that data can be written on the disk only in industrial conditions, i.e. the system may be used only for completed DB of images with 80 to 100 thousand records.

Digital DB for express polygraphy.

Input of images is made from a publisher's slide by means of a slide scanner ("KODAK" EIKONIX, 2800 lines per inch, 4096 shades of grey). ATVista graphical adapter is used (1024x1024 pixels, 16.777.216 colours). Visualization is performed on a high resolution monitor (12280x1024 pixels). A4 format hard copy is made on a JUKI 8000 colour jet printer (240 lines per inch) or a slide with 2732 lines per inch resolution on a slide printer.

Thus videoframe of the "ISO" automated information system will not only serve as a means of visualization, but together with DB of descriptions and Desctop Publisher system will permit immediate publication of exposition catalogues, which at present almost never come out in time.

The automated information system "ISO" consists of central, local and specialized subsystems. The central subsystem allows to accumulate in DB enormous amounts of descriptions and this is the most conservative part of the system and it is very difficult to make amendments in it. The conservatism of central data base of "ISO" automated information system, which can be compared to heredity apparatus ensuring the existence of species, permits the integration of local and specialized data bases. The latter, being less conservative, allow to adapt the system to the needs of concrete groups of users. The only restriction for local and specialized data bases is the requirement that the intersection of description characteristics of central, local and specialized data bases should be made in the format of the central data base which ensures automated exchange of information in both directions.

Now a few words about these specialized systems, their purpose and specific features.

It is well known that registration description os a single museum object is many times repeated by different museum services. In many cases (according to our experience up to 20-25%) these descriptions in different departments may differ and only the attribution counsil may resolve these discrepancies. Revealing these discrepancies, preparing lists of them and introducing changes after the decision of attribution counsil is labor-consuming and, as any mechanical procedure performed by man, fraught with errors. We have designed the "System of registration characteristics' verification" which allows automation of this work.

Here it's reasonable to mention the subsystem for objects temerarily in change in the Gallery. According to intensity of exhibition activity the flow of such documents maybe great, the typical feature being doubling of documents of various forms. Automation of this work will allow to regulate exhibition and purchasing activity in a museum and save the man from large amount of routine work.

Practically in every museum restoration work is under way. In some museums it is going on for centuries and a large amount of documents has been accumulated. For efficient processing of these, as well as for informational support of the current work, an information system is necessary which would include both documentary and factogrfical blocks. In a number of museums (e.g., in the Vatican museum) these functions are supported by independent systems. We consider it more convenient to combine these two systems in a single one, all the more that to our mind an efficient restoration system should include data base of images of objects under restoration as well.

We are designing the system "Restavrator" which belongs to the class of hypertext systems and can perform all these functions. This system is provided with a documentary data base which includes documents on restoration work performed earlier as well as arbitrary texts about current restoration activity. In this system search by keywords (a usual one for documentary systems) is performed. Since the system is provided with a table classifying diseases and kinds of damage of works of art (each of them has its own code) codes of kinds of damage and diseases mentioned in the text are written in a special field. In this way a high level of recall in a search mode without thesaurus and increase in search are achieved. There is also a DB of images which includes every object examined by restorators and a field with codes of diseases, and boundary of diseased area is shown on the image. Besides, every image is provided with its registration description which coincides with the one in the local data base.

Thus a user can do: 1) a documentary search in a text of restoration document; 2) a factographical search in a description corresponding to the structure of local data base, and 3) a factographical search in the table classifying diseases and kinds of damage.

It is easy to see that as data bases are being filled restorators will be able to conduct scientific research in absolutely new conditions, finding out correlations between a painter and usual diseases of his paintings, between storing conditions and diseases, between technique (material) and diseases etc. Instead of a long and sometimes ambiguous verbal state of conservation description it is possible when preparing exhibitions to print out an image with disease codes and boundaries. Of coarse if necessary the image can be accompanied by text commentaries and recommendations.

In modern museum a considerable part of work consists of exhibition activity which makes it necessary to permanently resolve exposition problems. In this respect "Dizainer" system we are developping is of great interest. A model of that system as well as a model of the "Restavrator" system is already fit for demonstration.

What can this system do? It allows: to draw on a monitor a wall of any configuration in any scale; to paint it in any given colour or any colour selected in a electronic palette; to scale painting or graphical work to the size of wall where it is to be exposed; to select corresponding frames; to find the right exposition layout by means of moving images on the wall. The selected layout of the exposition on the wall is printed out together with lower left corner coordinates in the scale of the real wall. This printout maybe immediately directed to the picture-hanging team.

The successful development of museum computerization is possible only if elements of scientific description and not just registration characteristics are entered into a data base. The term "scientific description" by itself in art history may mean anything — from description of subjective emotions of researcher to the attemts of formal analysis of the object under examination. The only evident thing is the fact that this source of information in its present form is not suitable for input into factographical systems.

To my opinion the current situation maybe briefly described in the following way. For successful operating of information systems in fine arts museums unification of scientific description of objects of art is necessary. This unified system should be used by all art historians working on description of objects of art, otherwise it's impossible to put into the system millions of objects stored in museums. To my mind today there doesn't exist such a principle which could permit unification of description on a conventional basis and decreeing doesn't give perceptible results. The situation is described as absolutely hopeless which according to the laws of genre implies that the author has a way out which he wants to suggest. [Ideas which will be exposed below have been partly already published in:

1)AICARC 2/1986 & 1/1987. Vil Mirimanov & Dmitri Pertsev. "L'ordinateur — un fichier electronique ou une nouvelle etape dans l'etude de l'art?"

2) Kompiuterizirovannye banki dannykh muzeinoi i arkheologicheskoi informatsii. (Materialy mezhvedomstvennogo rabochego sovieshtchaniya. Tbilisi, 1988). D.G.Pertsev "K voprosu ob unificatsii nauchnogo opisaniya pamyatnikov kultury" (in Russian)].

Let's try to look at the situation described above from a somewhat different angle. Art history as well as a number of other branches of the humanities is so to say in a pre-naturalist phase of development. It means that art history on the one hand doesn't have formal methods which could unify the research process and on the other hand it has a lot of experts who have accumulated empirical experience of classification of objects under examination. Sometimes this classification is given explicitly, i.e. characteristic features are chosen which form the basis of classification (in national art history these include research works in ancient russian or primitive art). Sometimes, and this situation is more common, the expert using his intuitive experience, without explicity selecting features for classification of objects, is nevertheless quite able to distinguish objects of art of a certain period, region and often to recognize a concrete master and determine the period of his creative activity. In fact every art historian is an expert in some field or another. It's not by a mere chance that in number of european countries the word "expert" is a synonim of the term "art historian" and it seems to be used more often.

Therefore aiming at a unified system of object description it is necessary to explicitly choose and formulate characteristic features which allow to recognize an anonymous work of art, i.e. to find its place in the spacetime scale, i.e. in art history. In other words to perform an attribution.

Thus we get an impersonal criterion for selecting characteristics for scientific description of works of art. It maybe formulated in general in the folowing way: if selected description characteristic allows to determine the place of the described object in the spacetime, i.e. to perform its expertize and attribution, then it is useful and worth entering the system of scientific description. Let's note that the same principle was used by Karl Linney for sistematization in natural history.

It remains to choose a convenient method wich would allow to use this enormous knowledge accumulated by expert art historians, explicitly formulate characteristics which enable them to perform attribution, sistematize and hierarchize them.

To our profound belief the technique of expert systems is such a method. In our case these are expert systems for automated attribution. An expert system created in contact with an art history expert who is a specialist in the field the system is built for, in the very process of its creation and especially during its testing will play the role of an efficient filter for selection of attributively distinguishing characteristics, forming the system of scientific description.

The considerations presented above are not a mere project. An expert system for automated iconographical attribution of Ancient Russia icons with a plot has been created in the Automated data processing department of the Tretyakov gallery. A joint project is planned to build expert systems in archaeology.

A future development of such an expert system may lead to its merging with an information system and creation of the knowledge base. Introduction of an image visualization system and iteractive realization on a videodisk will determine circle of users from specialists to any person who is interested in problems of art and has a PC and a videoplayer at his disposal.

It's our profound belief that creation and expansion of such knowledge bases will have fundamental consequences both for the development of the respective branches of the humanities (art history in our case) and for the mass culture in general.

Here the final goal is to create macrosystems allowing the user to call factographical museum systems, perform bibliographical search if necessary, and using the results of this search to call full text data bases of which "TASS" system is an example in this country.

The first step in this direction is installation of terminals of different systems which would make it possible for users to call such systems without leaving computing centers of the Tretyakov gallery, V.I.Lenin Library or TASS news agency. The experience in such a joint exploitation of factographical and documentary systems will permit in the future to resolve the problems of their integration.

Automated Data Bank on Culture and Arts

L. Tikhonova
Deputy chief, department of analysis and generalisation of information on the problems of culture and arts, Lenin State Library of the USSR, Moscow

At present work is going on concerning designing automated information retrieval systems in the field of the culture of the country with the automated information system «Soyuzkultura» created and functioning within the Lenin State Library of the USSR being one of them.

The system is destined for information services to specialists in the field of culture engaged in research, creative work and in the sphere of management.

National libraries of union repulucs possessing specialised information departments within the framework of their organisation as well as special libraries represented by departments of information on culture take part in the formation of the automated system.

The circle of the special libraries which are partners in the formation of the information system covers the State Central Theatrical Library, the Taneyev Scientific Musical Library of the Tchaikovsky Moscow State Conservatoire, the scientific library of the Tretyakov State gallery, the All-union State Library of the Foreing Literature. Among national libraries of union republics the national libraries of the Ukraine, Byelorussia, Kazakhstan and others are the most active participants.

In the first place the participation of information offices on culture and arts in the creation of the automated information system lies in the generation of an integral data bank and in the rendering of information services to a variety of users on its basis.

The functions carried out by the partners in the formation of the data bank are determined by a number of factors:

— the distribution of duties among information services of libraries concerning the study and processing of information flows in compliance with the subject specialization of libraries

— the level of the technological readiness of libraries to master the automated technology.

The entire field of the processed flow is divided between the parners.

The Lenin State Library of the USSR and namely the research department on culture and arts is occupied with the processing of the information flow according to the following subject directions: general issues of culture and arts; the cultural policy; the socio-cultural activities in the field of leisure; the museum science; restoration and care of monuments of history and culture; librarianship and bibliography in the USSR; the material and technical equipment of objects of culture and so on.

The special libraries, whose activities are determined by specific subject fields, have chosen the following prepogative directions: the Theatrical Library — «Spectacle arts, theatre», the musical library — «Music, musicology», the library of the Tretyakov gallery — «Imitative arts», the Library of the Foreign literature — «Librarianship and bibliography abroad».

In spite of the fact that this or that subject field is allotted to a specific library all partners take part in the decentralised processing of the flow with account being taken of all sources of the literature including the foreing one available in the stocks of these libraries. For the republican information centres on culture the literature in the languages of the peoples of the union republics giving a notion about the condition and development of the culture in different regions of the country is a priority.

The complex decentralised approach towards the analytical processing of the information flow ensures the completeness and many aspect character of the filling of the automated data bank reflecting the literature in diverse languages including European languages and those of the peoples of the USSR. The source base of the automated data bank is represented by monographs, serials, periodicals, unpublished documents and others. Depending on the technical equipment some offices are both generators and users of the data bank while others are users only.

The interaction of information services coming to the fore in the formation of the automated data bank, the transfer of data to systems, the distribution of information in the communication mode is accomplished by means of a network of information centres in the field of the culture. Such a network whose foundation is made up of the automated information system «Soyuzkultura», consists of territorially dispersed and mutually connected information centres of the above mentioned institutions of culture. The information centres are equipped with automated working places composed of personal computers with printers and other securing means.

The trend towards broadening the circle of users through enlisting new partners having rich information resources and modern technical means at their disposal for the automated information system «Soyuzkultura» is visible. Drawing in foreing partners besides information centres of the national libraries of countries of Eastern Europe, which are constant participants of the information exchange within the framework of the international system on culture «Interinformkultura» seems to be important.

The automated data bank on the issues of culture being in the making is the aggregate of data bases of variegated specialisation and filling. The tasks bound up with its formation and use are carried out on the computer HP 3000.

Bibliographic data bases including bibliographic information, short abstracts and reference elements such as codes of information holders, location marks, information on spacial and time character constitute the groundwork of the data bank. The bibliographic (documentary) data bases (five in all) are integrated with factographic ones which are built up on the basis of object sigh structures providing for the description of different chatacteristics of objects.

As the factographic data bases are a part of the integral automated data bank side by side with the documentary ones it ensues from this that their information massif is formed on the basis of a united incoming document flow. At that a mention of an object in a document serves as a reason for the insertion of factographic information about the object in the factographic data bases. The realisation of the principle of the processing at a stretch becomes apparent in the selection of the factographic information being conducted simultaneously while making the bibliographic entry. In this case the indication of the sources of facts is an indispensable element of the factographic description. It permits not only to mutually coordinate the documentary and factographic bases making up the automated data bank and furnish the users with complex information but to increase the authenticity of the imparted facts too. This especially appertains to those cases where questionnaires filled in as a result of an interview, an inquest or other information obtained through inofficial channels are sources of files.

At present six factographic data bases are being elaborated. Three of them correspond to the subject matter «Arts»; for this subject matter the directions «Theatre», «Imitative arts», «Music» are chosen. For the formation of the factographic bases five fundamental types of objects have been picked out: cultural events (exhibitions, competitions, festivals, conferences and others); works of art; creative associations (groups, institutions); personalia; interpretation of works of a theatrical, musical and imitative art.

Every type of objects is characterised by a specific set of signs united into groups of meaning.

Within the framework of the direction «Imitative arts» the subject zone «Inofficial imitative arts» is selected. It includes information about artists, who are not members of the artists' union, the so called «informals».

With the purpose of shaping the factographic data base of this subject matter four files are being created: artists, groups; works; exhibitions; commersial enterprises (galleries, cooperatives). Every file cumulates information reflecting all aspects of the creative work of an artist, his works and their interpretation, data of technical and commersial character. The appearance of works and their authors at one of the exhibitions serves as a criterion for the insertion of information about them into the factographic data base.

The technology of the collection of such information requires the expenditure of much labour and gaps are possible. In this connection a more intense interaction with art libraries of the country touching the selection and presentation of data elucidating and supplementing factographic description by processing information from a certain circle of publications is contemplated.

One of the directions of the creation of the automated data bank is the formation of the base «The culture of the peoples of the USSR: cultural ties between nations» oriented towards problems and building up on the material of central republican newspapers and other important sources ensuring the reflection of trends of the development of the cultural policy in the country and of the entire spectrum of the national cultures in many aspects. In order to give sufficiently full and objective information about the cultural life of the country not only to the countrymen but to colleagues abroad too a digest is planned to be created as an output from this with its following translation into English.

It is thought that on the present of the development of the information activities in the field of the culture calling the attention of specialists from information services and art libraries of other countries to the idea of the creation of an automated data bank is exceedingly important. International reciprocal actions touching the information exchange can become the foundation of the development of cultural contacts and correspondingly of the mutual enrichment of cultures.

Already now the information produce of the automated information system «Soyuzkultura» — fragments of bibliographic and factographic data bases — can be placed at the disposal of concerned quarters from diverse countries on a mutually advantageous base.

Young Adults and Libraries — a troubled relationship?

Ilona Glashoff
Hamburger Öffentliche Bücherhallen, Hamburg, Germany

1. Introduction

When German librarians are asked about their experience with young adults in their libraries, their answers can be condensed into the following three observations:

- Young adults do not manage the transition between children's and adult libraries. They are dismissed as users.
- Young adults do not read. They persue other interests.
- Young adults use the library as a place to "hang out", and do not make use of what the library has to offer.

These three assertions have one thing in common, the awareness that libraries are well on their way toward losing young adults as library users. Resignation to this fact is wide spread among librarians.

Increasing complaints about the "hopelessness" of young adult library work have led the national "Children and Young Adult Library Section" of the Deutsches Bibliotheksinstitut (Dbi) in Berlin to address the problem. In their most recent session, (1987-1990), they considered both how this situation developed and models to solve the dilemma.

1.2. Situation

Libraries in the Federal Republic of Germany (the term "Federal Republic" does not include here five new states in the area of the former German Democratic Republic) are predominately a combination of children's, young adult, and adult libraries. While almost all children's sections are separately located, there are hardly any such among young adult collections. The young adult section is usually located somewhere between the children's and adult sections.

Because children's sections are popular and generally accepted, space and furnishing are usually carefully planned. The children's area is commonly so situated that children and adults can use the library as far as possible without disturbing one another. There are cozy corners for the children, decorated appropriately and with expressly-designed furniture, to name only a few features.

But how do young adult sections look? Is the same care taken in planning space? Are there special furnishings for young adults? Does the collection address the interests of this user group, as is the case with children and adults? We find that, generally, special provisions for young adults go no further than supplying of books in one or more shelves, placed in the area between the children's and adult sections. (There may be an additional rack for paperbacks.) This limited effort assumes that those over 14 years of age use the adult sections anyway, and serve themselves from what they find on the shelves. The offering for young adults is a temporary solution. Perhaps this is one of the reasons many young adults stop using the library on the way from the children's to the adult sections. In any case, libraries hardly give the impression that they are particularly interested in the special needs of young adults.

Unappealing materials may also be one of the causes of the disruptive behavior of many young adults who come to the library. Their conduct could well be the result of the library's not meeting their needs. As for the conclusion, "Young adults don't read anymore", this might be so, (if it is indeed so - see below), because there is too little exploration by libraries of where the reading interests, or better, media interests, of young adults really lie?

1.3. A Basis for New Solutions

In cooperation with librarians and other experts in public library work, the German Library Institute (Dbi) has developed two projects which include both fundamental consideration of young adult work in libraries, as well as strategies and practice-oriented models for future work with young adults: the development of a marketing plan for public libraries and a project for planning and testing new conceptions of library work with young adults. Based on this undertaking, three questions leading to a new orientation seem to be particularly important.

1. On the basis of empirical studies (in the Federal Republic), how do young adults fare in the public libraries?

2. How do young adults use the media?

3. How can libraries improve, so that they do justice to this special group?

With the financial support of the Federal Ministry for Education and Science, the German Library Institute (Dbi) undertook in 1986-1987 the project, "Development of a Marketing Plan for Public Libraries". The supposition was that the public library should not only recognize social change, but that libraries must be actively involved in that change. An outline was drafted to enable every library to develop, step-by-step, its own marketing plan. Two important questions were asked.

1. How can present library users be kept?

2. How can latent user groups be reached and convinced to make use of public library services?

Employing empirical data, the Dbi described and analyzed media use, freetime activity and, in particular, the relationship of the public to books and reading. The data makes it clear which reading requirements and user interests should be especially considered when deciding the direction of future collections and services. The results of this study were published in 1987 (1).

2. Young Adults in the Federal Republic - some results of empirical studies

Looking at the marketing study, we might inquire first into the conclusions we can draw statistically about the attitudes of young adults. There are a number of empirical studies in the Federal Republic useful for such an analysis. The 1980 statistics of the Federal Republic of Germany identify a relatively high number of youth under 20 years in the population pyramid (Appendix Graph 1). According to the latest federal statistics (December 31, 1986), there are 61,140,000 people in the Federal Republic. Of these, young adults comprise 11,830,000 or about 20%. Projections for the year 2000 and beyond are not as favorable (Appendix Graph 2). There is a problem with these figures, that of definition of age levels. Between what ages is one a young adult? Since the fifties there has been a recognizable tendency to lengthen the young adult period by:

— a longer time in school (raising of the mandatory school age)

— a tendency to leave school at a later age

— longer periods set aside for formal education and study (Appendix Graph 3).

The 5-volume Shell study, "Young adults and adults, '85. Comparing the generations,"(2) questioned about 1500 young adults between 12 and 24 years of age. On the other hand, the study, "Young adults and the Media," completed by publisher Heinz Bonfadelli in 1984 and published in 1986 took into consideration the aspects listed above and questioned 4000 young adults between 12 and 29 years, who represented a total of 15,000,000 in that age range (3).

The order of life stages among young adults has shifted. The earlier sequence end of primary school, education for a vocation/profession, moving out of the parental home, sexual experience, and the foundation of family has become muddled. In contrast to the ever-earlier arrival of physical maturity among young adults is the delay of economic independence. In classifying their young adult books, however, librarians in the Federal Republic use different classifications. All of them are especially designed for children. To some classifications "young adults" are those from the end of the 12th to the end of the 14th year of age, or to some classifications they start simply at the age of 14 years.

2.1. Consequences for future Library Politics

Library users under 30 years of age have up to now made up the nucleus of public library users. Young adult interest in the library generally rises with the educational level. With the trend to the longer educational period, libraries have a chance to make themselves indispensable to young adults by providing relevant materials. At least this segment of present library users could be held.

We come to the question: "How can latent groups be reached?" Contrary to generally-held opinion that young adults have no interest in reading, empirical studies prove that reading is, even today, a strong component in the everyday life of young adults (see below). Librarians may well reflect on book marketing statistics, which show that young adults are buying more books at the same time that library use numbers are declining. Despite their poor economic situation, young adults are more ready to buy a book (be it only a bargain paperback) than to accept the offering of the Public library. One can only conclude that libraries either do not have the right materials or do not present them in an effective fashion. For, according to statistics, when young adults borrow books, they borrow mostly from friends and acquaintances (4).

The following table indicates the book preferences of young adults. (Appendix Graph 4)

"It must be in the interest of public libraries to examine their book collections to see whether they offer the types of books preferred by young adults with a lower educational level." (Entwicklung einer Marketingkonzeption...p. 231)

One might object that the readiness to buy a book is based on the growing availability of reasonably-priced paperbacks. This observation also has flaws. In an article, "The end of the Water

Babies," (5) a British study concluded that the paperback has brought reading closer to children and young adults. "They have learned to select and to buy, to develop their own tastes and reading habits." (5)

Paperbacks, it has been suggested, are popular because of their dissimilarity in outward appearance from schoolbooks. Paperback titles also change continually. By turning to paperbacks, libraries could give young adults what they prefermore flexibility and attractiveness than is found with traditional hard-bound books, (often kept too long in the collection and made unattractive with repeated repairs.)

3. How young adults customarily use the media

On the basic of statistics, we find that young adults do still read books. Today, however, they grow up with many types of media. (As in Gutenberg's time, there is still the tendency to warn of excessive use of the media.) Asked about their leisure activities young adults, in proportion to educational level, cited book-reading as one of the most important ways they spend their time. (Appendix Graph 5) A total of about 35 hours of their weekly leisure is devoted to the various media. Thus, while young adults continue to read books, they have also been receptive to developments in communication formats. (Appendix Graph 6) Media preferences (as shown in the graph) are dependent on circumstances such as amount of education, but also change with age. Over 80% of the 12-13 year-olds, for example, watch television daily; the percentage drops off with increasing age, and then rises again after the age of 22 years.

Cassettes, CD's, records, games. videos and computer-software are all important in today's social and cultural life. While allowing for solitary activity, they encourage creativity, skill, use of intelligence and more. As statistics show, young adults use the media to meet needs different from those of children and adults. Libraries must provide the media appropriate to meet these needs, and accept the fact that reading is only one of many possible activities.

The marketing study concludes that

— it is important to encourage young adults to read by gathering in one spot books corresponding to their special interests and appropriate to their educational level

— it should be possible to counter the resistance to libraries by providing a wider variety of media offering.

The ideas developed in the marketing study are presently being tested in three cities in the Federal Republic (Bremen, Bielefeld and Düsseldorf). It will be interesting to watch the interaction of collection, presentation and target group.

4. Models

From an empirical inquiry (1983) we learn that 56% of young adults are members of a clique or group (6). Since the beginning of the 80's this trend seems to be affecting library use; increasingly librarians and readers complain about young adults spending time in the library in noisy groups. Library personnel are caught between user complaints and the discomfort of having to exclude young adults from use of the library. Demands for training of personnel, or for strenghthening personnel through the addition of social workers, show that librarians do not feel they can handle the problem. However, the use of social workers on a trial basis (for example, in Bremen and Herten) proved no solution. Because young adults have few facilities of their own, they use libraries as meeting places; the library's primary functions are hardly taken into account. Librarians must consider how they can react appropriately to the importance young adults place on belonging to a clique, or being with their own kind.

In the above-mentioned project of the national Commission for Children's and Young Adult Libraries, suggestions were made for appropriate space, furnishings and media for young adults. At the age at which they are leaving childhood and orienting themselves to the adult world, they certainly need their own area, where they can be without disturbing others or being disturbed. It might be possible, with the proper tools, to continue the work so successful with children without interruption until adulthood is reached. The project plans to include a model library in each of three different sizes. A community analysis will first be done. Based on it, different ideas will be tested suitable to specific locality.

The three library size-types from smallest to largest are:

1. Basic small library

   In small towns or rural areas the library is often the single cultural institution. The target audience is unambiguous. The biggest problem involves the management of an expanded service in minimum space.

2. Library in a medium-sized town

   The project library should have its disposal relatively average space, personnel and equipment. Its potential user circle should be moderate.

3. Library in a large city system

   In this particular project library a special effort will be made to identify and meet the needs of young adults who live in areas of high stress (high percentage of foreigners, unemployment, and so on.)

After needs are ascertained new equipment concepts (furniture, lighting, color), selection criteria for collection, special services and targeted public relations will be developed. The practical trial phase has been set at three years. Interested librarians who see the need for special service to young adults have already been found for the project try-out. The project will begin when the Ministry for Education and Science is able to finance it as a step to encourage reading.

The social conditions in which the involved young adults live and the special and personnel possibilities of the library taking part will determine the steps taken for improvement. Acceptance in the 3-year period of the library as an institution for young adults would be the determinant of success or failure.

Young adult materials would not be exclusive to young adults. They would, however, if properly selected, be of special interest to those young adults who do not presently use the library because they do not identify with the collection. These are mainly those with less education, and those who consider the library as an educational institution and stop using it as soon as their education is finished.

4. Conclusion

In 1989 the association of librarians in public libraries in Germany VBB (Verin der Bibliothekaren Öffentlichen Bibliotheken e.V.) published a job outline of the diploma's librarian. It defined the social function of the public library and determined that its services must not ignore the potential user (in other words, most of the population.) The ultimate goal of successful library work is not the provision of the population with media. It is, rather, the encouragement of the best independent use of media and information possible. We must fashion and develop our work with an eye to changeing social and technological developments.

"The politically-adept librarian must set priorities as regards content and timeliness. One's own view of library work will, whether one recognizes it or not, influence the setting priorities... Equilibrium between change and the continuity and professionalism required for valid library service can most easily be reached by following the principle of strict orientation to demands and needs of the user..." (7)

For library work to be successful in the future, young adult work must be granted a particular priority.

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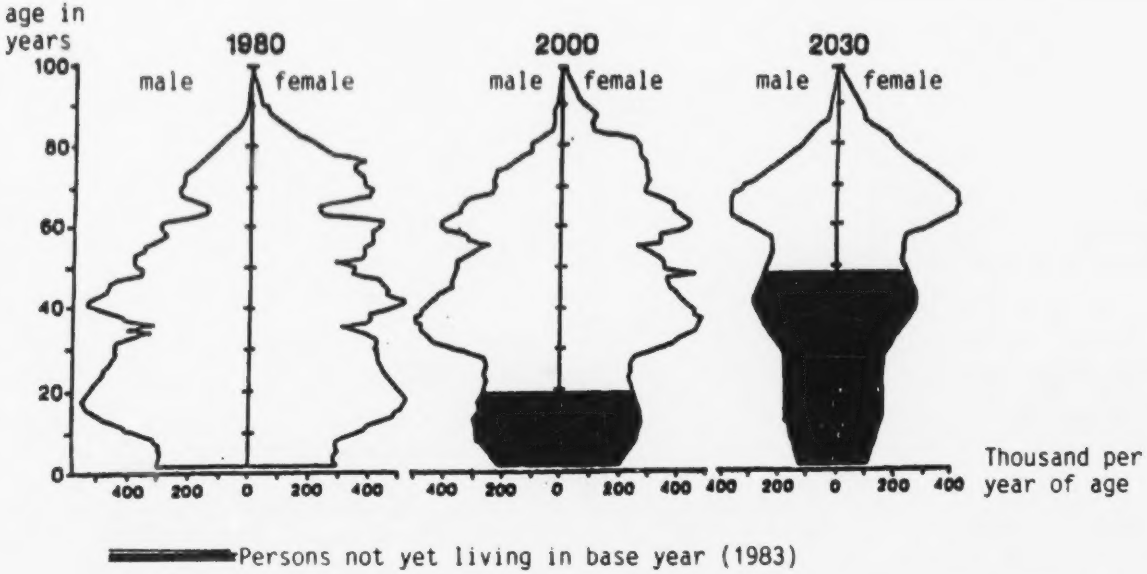
Appendix

Graph 1

Age composition of the German population 1980, 2000, 2030

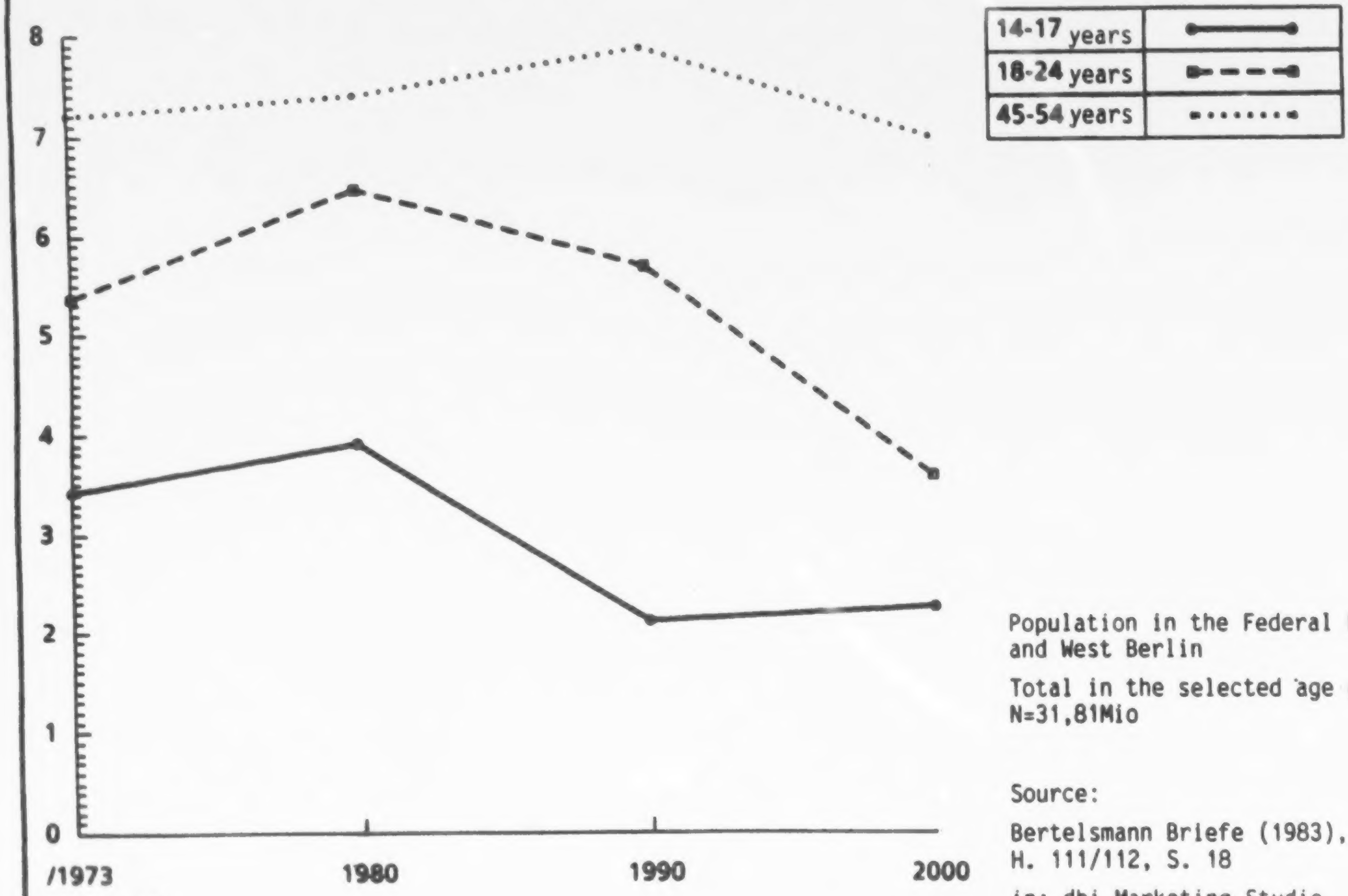
Population of the
Federal Republik +
West Berlin



Scource:
Statistisches Bundesamt (Hrsg.): Datenreport 1985 Abb. 10 S. 52
in: dbi Marketing-Studie

Appendix Graph 2

Numbers in the age groups 14-17 years, 18-24 years and 45-54 years 1973 - 2000
(Numbers in Millions)



Population in the Federal Republic and West Berlin

Total in the selected age groups
N=31,81Mio

Source:

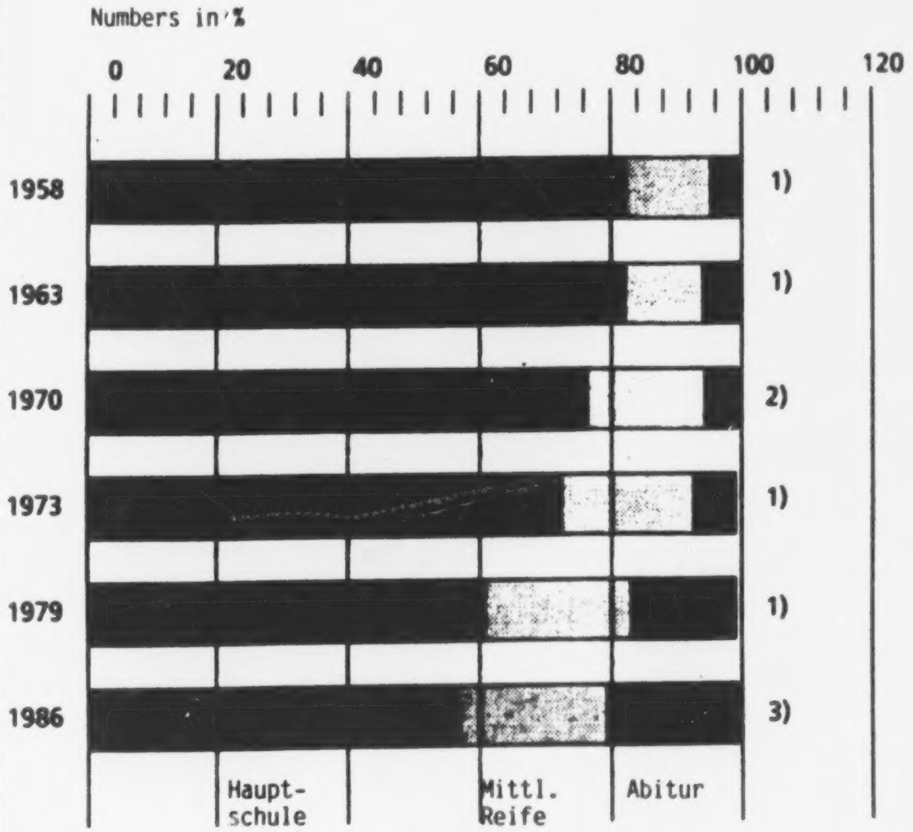
Bertelsmann Briefe (1983),
H. 111/112, S. 18

in: dbi Marketing-Studie

Appendix

Graph 3

Changes in levels of education between 1958 and 1986



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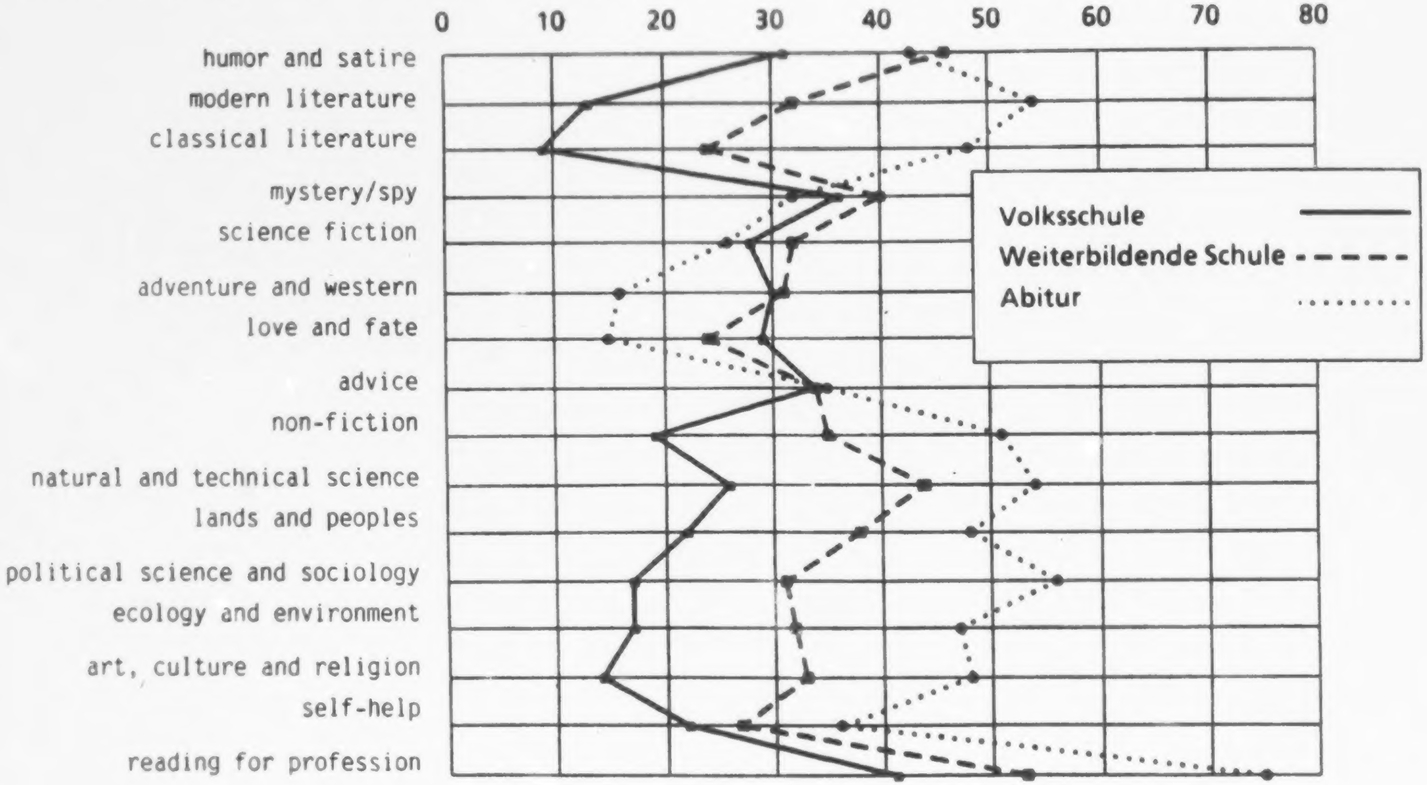
3) Allensbacher Archiv, IfD, 1986, Repräsentative Stichprobe der bundesdeutschen Bevölkerung ab 16 Jahre, Umfragenr. 4071, N = 2191 (eigene Berechnungen)
4) Die Quellen 1) und 2) sind UTTITZ (1985) entnommen

in: dbi Marketing-Studie

Appendix Graph 4

Reading preferences of youths and young adults between 12 and 29 years
(Youths and young adults reading books N=3270)



Scource:
Berg, K.; Kiefer, M-L (Hg.) 1986, Tab. 17A, S. 215
in: dbi Marketing-Studie

Appendix Graph 5

The ten most important leisure activities of young adults between 12 and 16 years of age

Question: How do you spend your leisure time - can you pick out everything on the list which you particularly like to do? (List of 24 activities, multiple answers)
Scource: Allensbacher Archiv, lfd. Stern-Jugendumfrage 1986
in: dbi Marketing-Studie

Schüler der Hauptschule N=336	Schüler der Realschule N=271	Schüler der Gymnasien N=294
1. watch tv (74%)	1. listen to radio(75%)	1. sports (75%)
2. listen to radio(71%)	2. Talk with friends (70%)	2. listen to radio (73%)
3. sports (68%)	3. sports (68%)	3. read books (73%)
4. be with friends(62%)	4. watch tv (66%)	4. talk w. friends (72%)
5. talk with friends (55%)	5. be with friends (63%)	5. watch tv (69%)
6. rest (52%)	6. read books (58%)	6. be with friends (63%)
7. movies (49%)	7. movies (52%)	7. movies (49%)
8. read comics (44%)	8. rest (48%)	8. rest (46%)
9. read books (38%)	9. listen to records and CD (47%)	9. listen to records and CD (44%)
10. video (37%)	10. member of a club (35%)	10. member of a club (35%)

Appendix Graph 6

Lenght of time spent using different media by young adults und 30 years old, a comparison between 1967 and 1983

	Read periodicals		Read newspapers		Watch television	
	in hours 1983	change from 1967	in hours 1983	change from 1967	in hours 1983	change from 1967
Volksschule	2 h 17 min	+ 3 min	2 h 48 min	+ 12 min	12 h 1 min	+ 2 h 59 min
Mittl.Reife	1 h 51 min	+ 14 min	2 h 45 min	- 38 min	9 h 1 min	+ 30 min
Abitur	2 h 6 min	+ 28 min	2 h 56 min	- 16 min	7 h 59 min	+ 2 h 21 min

	Listen to records		Read a book for entertainment		Read a book for educational purposes		Listen to radio	
	in hours 1983	change from 1967	in hours 1983	change from 1967	in hours 1983	change from 1967	in hours 1983	change from 1967
Volksschule	4h 23 min	+2h 44 min	1h 41 min	- 6 min	1h 12 min	+ 22 min	11h 19 min	+5h 1min
Mittl.Reife	3h 50 min	+2h 5 min	2h 3 min	- 51 min	2h 5 min	- 45 min	8h 9 min	+2h 28min
Abitur	4h 12 min	+3h 6 min	3h 6 min	- 13 min	4h 37 min	+ 30 min	10h 47 min	+4h 23min

Representative population between 16 and 29 years, FRA and West Berlin

Question: Please tell us very generally, how much time in the week you spend at each of the activities listed. Do not count what you do at work.

Scource:

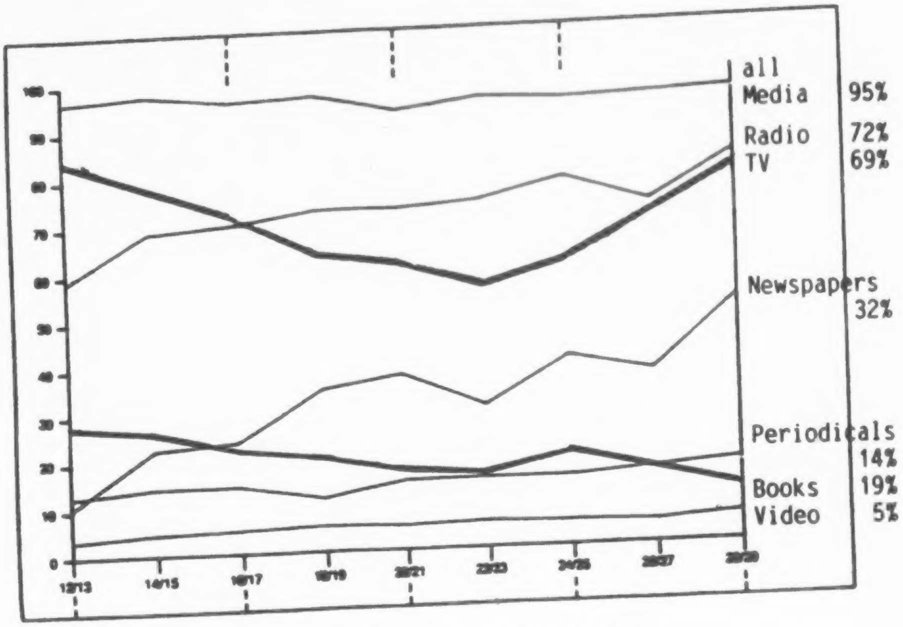
Allensbacher Archiv, lfD. 1967: Umfragenr. 2032, 1983: Umfragenr. 4023

in: dbi Marketing-Studie

Appendix Graph 7

Use of the Media

Use of the media according to age (mo - su)



The older one is, the less one reads books

Scource: Jugend und Medien (1)
in: Lesen (8).

52-CHILD-3/READ-4(WS)-E

Children and Television: But What About Books?

Aira Lepik
Lecturer, Chair of Librarianship and Bibliography at the Eduard–Vilde Institute, Tallinn, Estonia, USSR

The shaping and development of reading habits, of which the study of children's reading habits is part, has taken on a particular interest for many researchers.

The distribution of books, reading activity and the development of reading interests depend on various factors lying outside the bibliographic system, as it were. Analysis of these factors leads to the conclusions that the mass media play a decisive role, and that television has become the most important element among the media.

Everyday life as well as analysis by media researchers reveal our close ties to television. It would be difficult to find another cultural medium as everpresent as television, which takes up our leisure time day in, day out. According to sociological data of the Statistical and Information Centre of the Estonian Broadcasting Corporation, television organizes and stabilizes our daily life for approximately two hours every day.

Television has become an inseparable part of our lifestyle. Social psychologists studying problems of "way of life" have ascertained the fact that television has a considerable prestige factor. This is due mostly to the fact that information which is disseminated by television is very actively put to combined [ie. interdisciplinary] use. Everyone wants to be in the picture about everything these days, and this has become the norm, but it has become possible thanks to television. So we must regard television as a means for the spread of "way of life". It shapes the social behaviour of children and youth. Often, it also serves as hidden educator. The children of present-day Estonia observe the everexpanding world with eager and curious eyes. They will be the ones shaping the future of this country which is once again striving for independence. (...)

Ties to television are rooted in early childhood. According to researches of psychologists, a child as young as 1 1/2 to 2 years of age can follow action on the television screen to a certain extent. Until the age of 2 1/2 years, however, this remains of secondary importance, subordinate to the interest in the parents and in playing.

Television enters the child's life during his most intensive period of development, during which new information becomes important to him. This information influences playing, social interaction, and the imagination. But this new information, passed on to him through television, can create television fanatics. Conclusions drawn from research into "the mass media in the life of the pre-schooler" substantiate such claims. According to such research, toddlers consider the television set as the most important thing to them, but parents either feel that books are the primary influence on their children's development, or perceive a combination of books and television as main influence (Leino 1988).

Connections between television and books are apparent, and even desired, in everyday life. The conscious interest in a book and the passive viewing of the television set can form either a conflicting or a complementary combination. It appears that among other leisure activities, reading in particular is a significant alternative to watching television. Several researchers into the mass media consider the interest in reading to be a balancing factor to the influence of television on daily cultural life. The case of children and youth is analogous. Researchers into the way of life of students have observed that the more developed a student's cultural interests are, the more moderate will be his consumption of television programs. Children who have so-called free time on their hands and whose home life is characterized by cultural passivity are completely focused on television (Jarve 1985; Lepik 1988).

This formulation of the problem — television and reading, and their connecting, differentiating, comparative and balancing aspects — is thus taken as the subject of research in this paper.

The co-functioning and the differences of printed and television productions have become the subject for study mostly during the the last 20 to 30 years. The development of television determines the topic focused on — television began spreading through Europe in the mid-1950s (regular broadcasts began in Germany in 1952, in Czechoslovakia in 1953, in Rumania, Estonia and Latvia in 1955, in Poland in 1956, in Hungary and Yugoslavia in 1958, and in Bulgaria in 1959).

Various approaches present themselves for the study of the co-functioning of books and television broadcasts, of reading and watching television. Without going into individual examples, the following approaches can be distinguished:

1. The influence of the development of the mass media on the distribution and use of printed materials.

— attempts to prove the declining role of books, to make a case for the crisis situation that books are faced with.

— the point of view that the role of books is stable despite the development of the mass media; ignoring the fear that the book culture may be in decline.

— analysis of the identity of mass media and the production of printed materials, and the differences between them.

Concepts such as "cooperation", "conflict" and "collaboration" are used in the analysis of the connections between books and television broadcasts. The book and the television program are variously regarded as allies, as friends, as competitors, partners and enemies. Arguments against the possibility of cooperation between them are made based on their conflicting and opposing nature.

2. The influence of television programs on reading. This tendency is observed primarily in the changes evident in the structuring of leisure time. For this topic, as well, important approaches exist:

— television is regarded as a possible stimulant to the interest in reading.

— the concern about the minimal real influence of television on reading; television's minimal function as stimulant of the interest in reading.

— television as means of publicizing books.

— realizing the role of television as mediator of literature.

— television as means of imparting library skills; the role of television as one of the sources of bibliographic information.

3. The various aspects of the possible cooperation between libraries and television.

— the influence of television broadcasts on methods of book publicizing as used in libraries; the reshaping of traditional means of book publicizing in view of television production.

— the utilization of the contents and topics of television programs in the publicizing efforts of libraries.

— the formulation of a system of cooperation between the library and the mass media.

— the alteration of the form and content of bibliographic work in connection with the utilization of television.

— the expansion of the sphere of influence of the library in view of the possibilities offered by television.

— the library's participation in television programs; the library on the television screen.

The multiplicity of approaches to the study of this topic attests to the importance of the problem at hand and offers the opportunity for research on the various levels, ranging from theoretical discussions to the realization of the practical connections between books and television programs in a family setting.

The deepest and most vivid reading experiences are usually to be found in a person's childhood, and children's literature plays a decisive role in the development of a conscious and sensitive reader. Children's literature reaches its audience through the home, hence it is of primary importance to preserve the habit of reading in the family as a whole. The children in Estonia get only 5% of their books from libraries; children's literature is thus found primarily at home, and the presence of these books as well as the frequency of their use depends on the reading habits of the family in general.

In the summary of their research into "factors shaping the demand for book production", M. Lauristin and P. Vihalemm pose the question of how to bring about a deep and conscious relationship with books, and how to raise the children of avid book-buyers to be discriminating and open-minded readers with many interests (Lauristin, Vihalemm 1988).

Estonian libraries providing service to children must today find their place in a changed educational and cultural framework. There is a desire to break free of the wretchedness of material backwardness, as well as from the long prevailing view of the library as an ideological educational institution. Unfortunately, library holdings also do not meet the expectations of the readers, because the politics of the publishing trade have kept selection to a minimum and the number of copies produced to a maximum. Children's libraries in Estonia should become a sheltered institution, shaped for the children themselves and participating in children's culture in a manner appropriate to their specifications.

Whether children become readers is something which depends on the various factors. But as aforementioned, television is one of the most important of these factors. It can thus be expected that researchers are concerned about the minimal real influence which television programs have on reading.

Hannes Hüttner of Berlin has determined in his research into the use made of media by 9th- and 10th-grade students that the volume of reading reaches its maximum at age 12 and then gradually declines. H. Hüttner assumes that more and more time is instead wasted on radio and television. At the same time, he feels that this problem warrants more extensive investigation (Hüttner 1986).

Irmgard Dressler of Berlin claims that changes in children's use of the media also have consequences on reading. Great value is still placed on reading, yet in terms of time being devoted to it, it is already displaced — a development which ought to be monitored further (Dressler 1989).

Helmut Steinberg of Badenweiler is of the same opinion. He holds an interesting point of view, yet to be proved — that television today is becoming an important stimulus for reading, as well the case with the newspaper in the 1910s, radio in the 1930s and the cinema in the 1950s. The results of a public opinion poll taken in Germany form the basis for this claim. According to this poll, 37% of the persons interviewed considered television programs to be the deciding factor in the choice of books (Steinberg 1987).

Regardless of the conflicts between the various approaches, the problem is clearly recognizable — on the one hand, the combining of printed materials and television productions for purposes of personality development; on the other hand, the so-called conflict [trans.: meaning extrapolated; original illegible] between reading and television, shown in detailed comparisons [trans.: ditto] of these cultural activities.

The prereguisite for potential multivariate relative effect is the greatest possible distribution of picture and sound in various forms. But perhaps the question will soon be, what should be done to keep television from taking the place of the father, and the telephone the place of the mother. Who knows?

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The Role of Reading in the Life of Contemporary Children and Teenagers

Ada Lebedeva
Senior researcher, Lenin State Library of the USSR, Moscow, USSR

Data obtained at the first stage of survey "The State-of-the- Art and the Trends of development of reading of children and teenagers - library readers" comprise the empirical base of this communication. This survey was started in the Lenin State Library (LSL) in 1988. During the interpretation of material obtained we compared with the survey conducted in 1969-1971 called "Book and Reading in the Life of Small Cities". This was necessary for revealing the trends in the change over the past 20-year period.

Determining the place of reading in the life of children and teenagers, we have taken into account two aspects: reading to help studies and reading as an occupation at leisure time.

The former presupposes that reading is a basis for entire academic activity of schoolchildren. Therefore, time spend on the fulfilment of home assignments is the time of normative reading. We have studied the data on the duration of normative reading depending on the age characteristics of children and the region of their residence.

For most of children at the age ranging from 7 to 14 years the preparation for lessons is everyday occupation.

But in time spent on the fulfilment of home assignments children and teenagers greatly differ from each other. A particularly sharp differentiation is observed within the same age group.

For instance, two-thirds of junior teenagers (10-11 years) limit themselves to the fulfilment of only written home assignments.

The expansion of the sphere of cognitive activity which according to psychologists' data is a substantial age characteristic of junior teenagers takes place uotside normative reading since it is difficult to suppose that one hour (and sometimes even a lesser time) spend by 73.3 % of children of this age on preparing lessons is enough both for fulfilling written assignments, reading the textbooks and curriculum literature on various subjects of the school cycle.

These data demonstrate the alarming nature of the situation in the sphere of the channel organized by society for bringing cultural values to children and the absence of profound interest in studies among the majority of junior teenagers.

The comparison with the materials of the survey "Books and Reading in the the Life of Small Cities" (1969-1972) also reveals negative changes in children's interest in their main activity - studies. Twenty years ago scoolchildren aged 10-11 years daily spend on the preparation for lessons on the average almost two hours (1.93 hours).

Admist daily occupations at leisure time for 10-11-year-old children the leading role belongs to reading, walks and games.

However, the bulk of junior teenagers read little. One can hardly consider those who spend less than an hour on reading each day as book- lovers. Among 10-11-year-old children the reading of one book takes sometimes 2-3 weeks and one cannot speak about the adequate perception of the text.

Besides,too short encounters with books, even if they are on a dayly basis, limit the possibilities of the familiarization with literature of various types and genres. The delay of the literary development of a child occurs which is very noticeable in the future.

The familiarization with the world of book culture takes place in restricted frameworks. Therefore, we observe very small interest in reading works which are of sciontific cognitive value.

On the average reading is a favourite occupation at leisure time only for one-third of 10-11-year-old teenagers and they read not less than 2-3 hours each day.

Over the past 20 years leisure reading of 10-11-year-old children has also undergone considerable changes. For instance, the average duration of daily reading decreased from 1.65 hours (in 1969-1970) to 1.47 hours (in 1990).

If we take into account that the average time for preparing for lessons (in hours) also decreased(from 1.93 hr. to 1.34 hr.),it is possible to state that the intellectual development of this age active in the cognitive respect has evidently slowed down.

Among 12-13-year-old schoolchildren the leading place continues to be taken by a group which spends not more than an hour daily on preparation for lessons, although as compared with the previous age category (10-11 years) its share has decreased from 73 % to 58.8 %.

The group of schoolchildren whose duration of fulfilling home assignments comprises 2 hours each day has increased by 50 %. This makes up 33.8 %.

The group in which senior pupils spend not less than 3 hour each day on preparations for lessons (5.8 %) has increased.

The subjective orientation of children of this age towards their favorite scholl subjects exerts considerable influence on the duration of normative reading and its frequency. Answers to the question "If you get a good book, but you must do your lessons, how the you act?" reveals this especially graphically. While in will main all junior teenagers unambiguously answered that at first they would do lessons 12-13-year-old children replied that in different situations they would act differently: "If lessons are faouvorite, at first I do lessonsm, if not, I read."

However, if we characterize a group of 12-13-year-old pupils on the whole, we should admit that the average time spend on carrying out home assignments has decreased by the present time by almost an hour as compared with the data of the survey for small cities. In 1969- 1971 average time (in hours) spend by top schoolchildren on doing lessons per day amounted to 2.58 hr, today this figure is 1.5 hr.

As compared with the group of 10-11-year-old children the range of occupations at leisure time of 12-13-year-old pupils has broadenee considerably, athough the leading places continue to belong to reading walks and games.

In case of detailed comparison of indices relating to age groups (10-11-year-olds and 12-13-year-olds) essential differences are evident.

Among 12-13-year-olds the orientation towards contracts with coevals has increased while time of being at home in leisure hours has decreased: chilfren not only play and walk together, but also jointly attend cinema and museums, listen to tape recorders and see video films.

At the same time, the number of those who read at leisure time (often combining reading with other occupations) has risen: while in the group of 10-11-year-old those who read on the eve of the poll comprised on the whole 64.9 %, among 12-13-year-olds this figure made up 71.6 %.

Activity of 12-13-year-olds relating to television programmes has increased: while among junior teenagers only 2.4 % saw TV programmes, among top schoolchildren TV viewers made up already 17.4 %.

The typical feature of this age group is the presence of several occupation at once which attract children at leisure time, while among 10-11-year-olds those who prefer a single type of spending leisure time predominated. This is especially clear in comparing the behaviour of 10-11-year-olds wiht 12-13-year-olds as far as reading is concerned. Whereas among younger teenagers those who devoted their leisure time to reading comprised 32 % of pollees, the similar group among 12-13-year-olds was smaller - 25 %.

When it is necessary to choose unambiguosly beetween reading and contracts with coevals, most of elder teenagers prefer strolls, games, meetings with friends. It is no accident that in empirical data obtained a great discrepancy between answers to questions: "What did you do yesterday at your leisure time?" and "Which book are you reading now at yoir lesiure time" is traced. A concrete book was called by 91.1 % of elder teenagers while 71.6 % of the pollees read on the previous day.

There is another specific feature in leisure-time reading of elder teenagers: the emergence of books, magazine and newspaper articles associated with technical interests of schoolchildren of this age, with sports interests, training of dogs, etc. However, this group of children is not numerous: 8 % of pollees read books on radio electronics, aircraft engineering, space exploration, world records and dog-breeding, etc.

During the poll 5.8 % called articles on radio electronics from magazines, 1.4 % elder teenagers read newspaper materials on technical advances, 1.4 % read articles about housekeeping.

Among elder teenagers the number of groups considerably differing in their attitude to reading has increased. This attitude determines the place of reading, its duration and frequency in the life of top schoolchildren.

Among those who believe that reading is their favourite occupation and actually realize this subjective opinion reading comes *first* in the leisyre structure and in terms of time lasts 2-3 hours daily and often even more. This group includes a quarter of elder teenagers who answered the questionnaire (24.8 %).

Most of 12-13-year-olds do not show particular interest in reading. The stable need to read books has not shaped among them. Their turning to reading at leisure time is of a situative character and reading ranks *third* in the leisure structure, while walks and games hold the first and second places.

However, this group is inhomogeneous. This group includes some children who "have no time for reading" because they "spend a lot of time on helping in domestic work". This group is particularly conspicuous among elder teenagers living in Central Asia (7 % of pollees).

In particular, 6.1 % of elder teenagers do not read because they "have not enough time", do lessons for a long time, get tired and, therefore, prefer to walk and meet friends at leisure time.

Among 12-13-year-olds there are children (5.8 %) who think that reading "is useless", "a very dull thing" and reading does not figure in their leisure pattern.

The data obtained do not enable us to assert like 20 years ago that the offensive against books and reading is leunched by audiovisual mass media, first and foremost, by television: Only 2.4 % of junior teenagers questioned by us saw television programmes in their leisure time, 17.4 of 12-13-year-olds and 9.2 % of 14-year-olds were viewers of TV programmes in their leisure time.

Analysis of the data of the survey conducted shows that such occupations as walks and games considerably exceed in their duration teenagers' reading activity. Reading ceases to play the leading role in the life of children. This is true not only of normative reading, but also of reading at leisure time. Children prefer to spend time (their leisure time) outdoors after classes, and many of them take books only in the evening when they are tired and often under pressure of adults.

Thus, the situation is very alarming. Reading as one of the major spheres of the spiritual activity of children and teenagers is often replaced by idleness.

This is accounted for, primarily, by the absence of or difficulties in getting books interesting for schoolpupils, in the limited possibilities of the literary medium in which the growing person is shared, as well as the ineffective popularization of literature.

Our survey has shown that children's readig and its state-of-art are most sensitive to all cataclysms experienced by society.

The shortage of books has affected, first of all, the readers' behaviour of children and teenagers.

There is a very great gap between their real desired reading. The subjective wishes and literary orientations of children are not realized in the range of their real reading or are realized within very restricted limits. Meanwhile the devekopment of children's reading activity is possible only when supply exceeds demand and is richer than it. The diversified reality of life so important for the spiritual moulding of the child's personality and freedom in the familiarization with the world are not since the literary resources of the environment in which young readers reached through books live are very scarce, and everywhere demand for children's literature is satisfied only insignificantly (30-35 %).

For instance, 36.6 % of 8-9-year-olds want to read folk fairy-tales (of their own people, other peoples of the Soviet Union and the world), but they make up just 5.3 % in their real reading. The situation with readers who are 10-11 years old is not better and even the trend towards the worsening of the situation is observed. In their real reading folk fairytales comprise 3.4 % while in desired reading folk tales make up 34.3 %.

The great gap between real and desired reading is observed as regards fairytales written by professional writers, adventure literature and science fiction loved so much by children and teenagers.

In desired reading of 8-9-year-olds works belongig to science fiction make up 32.1 % whereas in real reading just 1.8 %; in the group of 10-11-year-Old readers science fiction comprises 46.4 % and 12.4 %, respectively; among readers who are 12-13 year old these figures comprise 57.6 % and 11.5 %, respectively; among 14-year-olds these figures are 70.0 % and 10.9 %.

Discrimination of social groups entering the age of literary socialization has already brought its lamentable fruits. Over 20 years which have elapsed since the survey "Books and Reading in the Lifr of Small Cities" we see negative changes in real and desired reading of scientifically cognitive literature.

In 1969-1971 in small towns 73 % of the pollees read and wanted to read scientifically cognitive books, specifically, 84 % in the groups of 8-9-year-olds; 83 % in the group of 10-11-year-olds; 61 % in the group of 12-13-year-olds and 59 % in the group of 14-year-olds.

At present the amount of real and desirable reading of scientifically cognitive books by children has decreased roughly by 75 %.

The comparison with the situation which existed 20 years ago show that topical school education matters little in the readers' life of contemporary children and teenagers. In the late 1960s studies and the perfomance of school assignments were for children and teenagers the main factors influencing the turning to scientifically cognitive books. At that time amidst the motives which stimulated children to read scientifically cognitive literature a prominent place belonged also to personal motives which were free from obligatory or utilitarian aims.

The readers' demand which is not satisfied permanently leads to another negative consequence: the share of reading in the structure of pupils' leisure time is decreasing. Reading does not become a favourite occupation for the aenormous number of children and teenagers. The development and complication of the need to read does not take place. To ensure the assimilation of this complex type of human activity the child should constantly enrich his (her) experience of communion with books.

Factors which Contribute to Reading Motivation by Middle Grade Students in the United States

Dr. Shirley Fitzgibbons
Associate Professor, School of Library and Information Science, Indiana University
USA.

Introduction:

In the United States, as in many other developed countries, there has been great interest in the last ten years in declining reading abilities and the lack of out-of-school reading for recreation. Many studies have shown that watching television dominates the use of leisure time of most youth.

During the 1987 — 1991 time period, an exciting new project was implemented in the state of Indiana to encourage and motivate youth in grades 4, 5, and 6 to read for enjoyment.

The Reading Excitement and Paperbacks (REAP) Project administered by the Indiana Department of Education and sponsored by the Lilly Endowment is a unique project in the United States similar to two "book flood" projects in New Zealand and Great Britain. The project attempted to promote voluntary reading by young people through two major contributions: placing in selected schools a large collection of permabound paperback books and encouraging these schools to provide motivational reading activities.

Though each school was required to provide some evaluation of the project in a report to the Department of Education, it was evident that a more major effort should be made to examine the project in a more holistic way to assess its value. An evaluation team selected to provide this assessment comprised this author and two doctoral students at Indiana university.

Evaluation methodology:

Three questions formed the framework of the exploratory, naturalistic investigation:

— What do the programs look like in operation?

— What evidence do we have of the program's effects?

— How has the teaching-learning process changed?

Two information sources were used to answer these specific questions and to serve as the evaluation's focus:

— final reports from 27 schools

— visits to six selected school sites for observations and interviews with teachers, students, parents, and other participants

A content analysis was performed of the 27 reports with important categories and themes emerging. These categories also formed the basis of informal interview schedules. The categories included: administrative structures, access and availability of new books, motivational activities, and home involvement in the project.

The six schools were selected from the ten schools which were to continue in the project for the next stage due to their successful implementation. These six schools represented a diversity of characteristics including: rural/urban, geografic location, staffing patterns, and book location.

At each school site, the two (or three) person study team spent a whole day, interviewing focus groups of students, individual teachers, administrators, and librarians/coordinators of the project. Most interviews were tape recorded for later transcription but notes were also taken. Children were interviewed in groups of four to seven by grade levels, and when possible, by reading ability level.

In the schools visited, a total of 41 classroom teachers and 336 children including 75 fourth graders were interviewed, 191 fifth graders, and 55 sixth graders. In addition, 15 seventh graders were interviewed in two middle schools which were part of the elementary school campuses visited. These seventh graders had been involved in REAP for the past two years. Also interviewed in the schools were: eight other teachers including those teaching reading, special education, and students with learning disabilities; thirteen librarians as well as one library aide and four library volunteers; six principals; twelve parents; and two public librarians.

Findings of the Study:

Six separate case studies formed a narrative description of the schools visited with a rich description of the views of students and teachers through quotations and general statements of the groups interviewed.

General themes were identified which best described both overall patterns of the project schools as well as successful elements. Sample findings will be presented in this section of the report.

Administrative structure

The combined coordination by the school librarian and the reading teacher appeared to be a successful administrative arrangement. This was the pattern in four of the twenty-seven schools; in one of the schools visited, this pattern provided a model situation with shared responsibility by two dynamic, enthusiastic people who had a great deal of support by the principal.

The most common pattern included the school library media specialist as the coordinator. In at least twelve of the schools, almost half, this was the case. Though this was often effective, it varied according to the status of the librarian as full-time or half-time, the flexibility of the library class scheduling, and the support staff provided for the school library. In the four schools visited with this pattern, the more successful project was in a school with an additional half-time school librarian. Whether it was simply a matter of time to devote to the project, or whether other factors such as the school librarian's personality or relationship with teachers and students determined the success of the project, needs to be pursued further.

The principal's support of the projects was a critical factor. In several schools, the principal initiated the idea of applying for a REAP grant and brought this to the attention of the librarian. In most schools visited, the principal maintained a high level of support during the project. In some schools, there was a change in principal during the REAP period and this caused some change in the enthusiasm for the project or less support for extra time for the coordinator.

Access and Availability of Books Before and After REAP

It appeared that before the REAP project began in 1987, there was an inadequate library collection for the number of students in most of these schools. The inadequacy of the collections as described by some librarians and teachers included: collections which needed major weeding, not enough fiction for grades five and six especially of popular books, too small a collection, and an inadequate collection to support a literature-based reading program. Of the schools visited, only one school had an adequate collection in the view of the school librarian. The REAP books probably accounted for an increase of between ten to twenty percent new books in these schools. It is possible that due to the influx of a large number of new books that circulation rules might have changed; i.e., students might be able to check out two or three books at a time rather than one.

Many of the schools' student populations were isolated from books, libraries, bookstores, and cultural experiences due to their geographic locations and home backgrounds. For these reasons, several schools had as one of the REAP program objectives, providing a literary and cultural environment in the school.

The large number of new books and access to them are major ingredients in the REAP Project. In some schools the new collection of books appears to be major benefit. REAP collections, which added approximately 1000 titles to each school's collection, were high interest, attractive, permabound paperback books of mostly popular contemporary fiction. Several schools used part of the monies for duplicate copies of popular titles, Young Hoosier Books, or for multiple sets of books to be used in reading groups, literature groups, or all-class reading.

The REAP project director had selected approximately 650 titles for a preview collection. This collection was brought to each school for several days. During this time, students, teachers, librarians, and sometimes parents had an opportunity to browse and make suggestions for the school's new group of books. Of the six schools visited, most of them had students and teachers involved in selection of the REAP books; this was seen as a prime motivator and benefit of the project. Students felt an ownership of these books and eagerly waited for their arrival. Teachers were also introduced to current, popular children's literature.

Twenty-two schools housed REAP collections in school libraries, either as separate collections or integrated into the existing collection. Though no general observation can be made concerning the success of these patterns in schools not visited, it did appear that in schools visited, some special shelving or arrangement did promote the books more with students. For example, one school library used an especially attractive and noticeable store-type, book display container which resulted in everyone in that school knowing about the REAP books. Most school librarians reported that students in grades four, five, and six usually went to the REAP shelves first on visits to the school library. Some schools who had initially kept the books in a separate collection later integrated them and found this led to some student disappointment.

Four schools used the REAP books as rotating classroom collections among the designated REAP grades. Only one of the schools visited had this arrangement. Though it was very successful in the eyes of teachers and students, this may have worked as well in this school due to the following circumstances: an adequate school library collection, inadequate classroom collections, and a fixed library schedule which made it difficult for students to come to the library frequently.

Motivational Activities that Work

There were several motivational strategies promoted during the REAP project which were mentioned by teachers and students as being very effective, the most fun, or which gained the greatest participation. Teachers and students were especially enthusiastic about two classroom activities: Silent Sustained Reading and teachers reading aloud. The combination of these two activities with some reading incentive or award program appeared to have the greatest impact on student reading behavior.

Motivational activities which became either part of regular classroom activities or on-going school activities seemed to have a greater influence on behavior than a short-term (weekly or monthly) major activity such as one school's World Tour Week or another's month-long, book promotion project.

Several types of activities were found in the schools; these can be categorized as follows:

Award or incentive programs such as Book-It, Young Hoosier Books, school-wide award programs, and reading as prerequisites to specific programs

Reading time in the classroom devoted to Silent Sustained Reading or reading to peers

Reading time outside the classroom such as reading at home a specified time as an assignment, the Turn-Off TV and Read program, readathons/sleepovers, or reading with a parent

Reading time outside the classroom such as reading to others (Nursing Home Project; reading to younger children)

Literature sharing such as the teacher or librarian reading aloud, or parents/celebrities reading aloud in the school

Sharing books read in written or oral communication, in visual form, in promotions such as videos, displays, book floats in a parade; also in discussions with teachers, peers, or literature circles

REAP Project Activities

Reading motivational activities which were sustained, long-term, and part of the total school's focus seemed to have more effect than many short-term, "glitzy" activities. Several schools had many special activities which involved a great deal of extra work on the part of the coordinator and other volunteers. Some of these activities were not always as successful partly because of the intensity of effort required and an apparent lack of integration in classroom schedules. Other schools focused on one ongoing project over the entire school year such as the monthly award assemblies. Though each school based its activities on the needs of their students (i.e., an afterschool program in the school which had students who all walked to school), it was apparent that a few activities which were well-planned, endorsed by the teachers, and more integrated into classroom activities were more effective.

Approximately twenty of the twenty-seven schools offered book award or incentive programs as motivational techniques for individual students, their families, or classrooms. Reading was counted in various ways for these contests: the number of books read for a particular time period (weekly or monthly), the number of pages read, or reading books of a particular type, theme, or for a specific project.

Incentive and award programs are somewhat controversial in the U.S. among librarians and teachers. Yet, twenty of the twenty-seven schools offered these programs for motivational purposes. Student comments were favorable about these programs on the whole. This was an interesting finding which had to be accepted on the basis of teacher and student enthusiasm for the programs despite this evaluator's personal bias against incentive programs. Teachers consistently commented that their students were reading more when these activities were introduced. Several incentives became a matter of pride to students: having reading charts on display, earning credits for special activities, and winning monthly or year-end awards. Students knew who read the most and seemed to admire these readers. Competitions between classes and grades seemed to motivate students. This finding may only be true in relationship to certain kinds of readers and needs to be explored more fully. The gifted and talented students did not react as favorably to the incentive programs.

One school had monthly assemblies and gave both individual awards (certificates and small prizes) and a trophy for the grade that had read the most the preceding month. Another school had after-school activities on themes; students read books on these themes to be eligible to participate in the activities.

In addition to these incentive programs, twenty-two of the twenty- seven schools offered other special REAP motivational activities. Several of these schools required a certain amount of reading before students could participate in the special activities. One of the most popular activities was the sleepover/readathon night. Often this event was used as an award for students' reading; many teachers, principals, and sometimes parents also attended.

Another activity used by several schools was the "Turn Off TV and READ" idea which was done in various ways. This activity involved parents in one of two ways, participating in the reading activity or signing off on the child's reading contract. Other all-school or all-REAP grade activities included:

- theme months such as READASAURUS and World Tour
- Fridays as special reading days
- celebrity readers or speakers including local sports stars
- voting on favorite books

Classroom Activities

The impact of REAP varied a great deal in terms of the involvement of the classroom teachers and in the integration of special reading activities in daily and weekly schedules. In some cases, the project influenced the reading program. For example, one school had a regular reading program which included reading for enjoyment; this school used the REAP project to further stimulate this program in the classroom.

Many schools already had Silent Sustained Reading (SSR) times and provided teacher read aloud programs in the classrooms before the REAP project began. Approximately nineteen schools (70%) reported that they were involved in SSR programs during the REAP project. Silent Sustained Reading programs varied in different classrooms and schools. Usually the program encouraged the whole class to read silently (including the teacher) each day for ten to fifteen minutes of twice weekly for a somewhat longer period.

Approximately seventeen schools included active teacher read aloud programs. In most cases, it was apparent that the influx of new books and the REAP project's focus on the enjoyment of reading increased the time given to these activities in the classroom. In schools where fourth grade classrooms emphasized these activities and the fifth and/or sixth grades did not give as much time to them, students looked back fondly at the previous grade and teachers.

When questioned about favorite classroom reading activities, students consistently mentined teachers reading aloud. Favorite book titles often reflected the books which were read aloud. Almost all students expressed great interest in being given time to do recreational reading in school. However there were some classrooms where students reacted to "being forced to read at particular times" or to "dropping everything and reading" at what seemed to be inappropriate times. Teachers also wanted to schedule SSR times in their classrooms rather than have mandatory SSR school times.

AS noted above, many classrooms were using reading incentive or award programs. Several teachers designed their own award programs such as Read Around the World or Walk Around the Classroom projects. Other activities that were teacher-initiated included:

- students reading aloud to a younger grade level (book buddies)
- students reading aloud to a peer or to small groups
- students reading aloud to other groups such as in nursing homes
- literature circles
- book reporting in a variety of ways from video book teasers to art activities
- weekly sharing of books read in class
- sharing books with teachers or parents to "prove" they were read to receive points or awards
- contracts with parents to sign off on student reading or parent/student sharing books together

Home Involvement

Although parental involvement was an objective of both the REAP state-wide program and several schools' projects, this became one of the objectives that was not fully met. Many of the schools chosen for REAP grants were chosen because they were schools with many at-risk children and were in communities that were either rural or inner city areas. Parents of these students were often single working parents, two parent working families, and parents with low income levels and low educational backgrounds. A problem already existed in most of these schools with parent involvement and communication. Even though most of the schools tried to involve parents through special programs, newsletters, and inviting them to become involved with their child's reading at home, their reports indicated that they were not very successful in these efforts.

Some examples of successful efforts in parental involvement were reported. In one school, a special Grandparents Week brought out hundreds of grandparents in a rural community where generations remained in the locale. In another, an open school library in the evenings brought a small number of parents with their children both for checking out books and for programs.

Evaluation Efforts by Schools

Areas evaluated by school reports produced some evidence of the following:

- attitudes toward reading
- reading behavior

— reading skills

— general impressions

Student Attitudes

Although most schools tried to evaluate students' attitudes in some way, few were successful. Information about attitudinal inventories was provided by the REAP project director. Local REAP coordinators did not feel comfortable with either the analysis or interpretation of the attitudinal data. In several cases, it was inappropriately cumulated across grade levels.

Five of the six schools visited had attempted to evaluate attitudes using the Estes Attitude Scale or another attitude scale the school had developed on their own. In several cases, there seemed to be a decline in positive reading attitudes the second time the inventory was administered. This may have occured because the pretest was given at a time of high student interest and involvement, during the preview and selection of REAP books. There was little consistency in timing of the pre- and post-administration of these instruments.

One school who had analyzed the Estes Attitude Inventory in an appropriate way included in their final report results of five questions as evidence of changed attitudes. These are listed below to give the flavor of reading attitudinal surveys.

> Reading is a lot of fun for me. (yes responses in grade 5 increased by 75%)
>
> Books are usually interesting enough to read all the way to the end. (yes responses in grade 4 increased by 65%)
>
> The only reason I read is for class assignments. (yes responses in grade 4 decreased by more than 66%)
>
> Telling someone about a book I have read is a lot of fun. (yes responses in grade 4 increased by 20%; yes responses in grade 5 almost doubled)
>
> I would rather read than play most games. (yes responses in grade 5, doubled)

Equally as interesting as these overall results was another statement in that school's report indicating positive changes in the scores of several previously unmotivated readers who had attended REAP events.

Student Behavior

In two of the six schools visited, teachers kept records of the amount of student reading. In three other schools, students kept individual journals or logs of their own reading. Teachers who kept anecdotal records of checklists of their students' reading behavior, often recorded these for each grading period. Sample statements of reading behavior included:

— Reads in spare time in the classroom

— Is attentive when read aloud to

— Talks to classmates about materials read

— Enjoys reading aloud

— Is attentive during assigned reading time

— Applies basic reading skills

Samples of individual student reading records were included in some schools' reports. Other schools reported the numbers or percentages by grade level of the children participating in each all-school or all-class activity. For example, in the school which had the all-school awards program, the school reported the highest membership ever in grades four and five during the REAP years.

Student Reading Skills

Only two of the six schools visited reported the results of reading test scores of students. One problem is that the third and sixth grades take the state-required reading ISTEP competency tests while other standardized reading tests are given in other grades. Some schools did not give standardized reading tests other than ISTEP. Comparison of the percentiles of these different tests between grades or individual students is questionable.

Some schools and teachers seem to be moving away from complete reliance on a basal reading series and moving toward a literature- based or whole language approach to reading. There seems to be less testing or at least less reliance on the basal reading tests in these schools. There is not enough consistency in the use of test instruments to recommend comparisons between schools, grades or individuals from year to year.

Other Measures Used by Schools

Several schools reported circulation statistics over the time of the project. In most of these cases, circulation increased dramatically. In two schools visited, circulation figures were not available. One school has no circulation system but rather uses an honor system. In the other, REAP books are used in classroom collections and if they are checked out to take home, a record is not kept.

Impact of REAP Program on Schools:

- — The REAP project has motivated school personnel to integrate recreational reading or reading from trade books into the regular classroom program.
- — Classroom teachers have begun to recognize the value of recreational reading and its relationship to the development of their students' attitudes and skills.
- — The REAP project encouraged the trend in public schools to move toward literature-based reading programs partly by providing a large number of trade books and some multiple copies
- — Teachers recognized the importance of having a large number of children's books easily available.
- — Teachers recognized their need to become more knowledgeable about the large number of children's books.

Overall, the REAP books and ready access to these books emerged as the most important contribution to the schools and influence on student reading in the views of teachers, principals, and the coordinators of the REAP projects.

Conclusions and Discussion:

There are several general findings which have emerged from the study. These findings are based on the evaluators' visits to six school sites and reinforced by the twenty-seven schools' evaluation reports.

ACCESS TO A LARGE AND DIVERSE COLLECTION OF LIBRARY/TRADE BOOKS IS ONE OF THE MOST ESSENTIAL ELEMENTS IN ENCOURAGING CHILDREN TO READ FOR ENJOYMENT

There are several aspects to this finding. These include:

- — the quantity of attractive books with inviting covers
- — the format of permabound books which are paperbacks with sturdier covers
- — the choice of popular authors and titles including series books and high/low books
- — the duplicate titles and multiple sets for reading groups
- — ready access to the books in special displays and shelving in the school library or in classrooms

Specific reaction by coordinators, principals, and teachers on the value of the REAP project to the school almost always began with comments on the books. The REAP schools needed books and the format and variety of titles served the project well.

ANOTHER IMPORTANT FACTOR IN ENCOURAGING CHILDREN TO READ FOR ENJOYMENT IS THE ENTHUSIASTIC PROMOTION OF BOOKS BY ROLE MODELS.

This was not always specifically stated by teachers and other school personnel but became evident through student and parent comments. One school librarian summarized it well:

> "....gimmicks, contests, displays, speakers, all contribute.... but the more basic elements of book availability and adult encouragement seem to be the major ingredients in producing life-time readers."

Students made the case by their enthusiastic endorsement of specific teacher role models who not only read aloud but enjoyed the activity as much as the students (even cried over some books); these teachers not only provided time for SSR but read themselves for fun during that time. They also enthusiastically discussed and promoted books that they knew. Previous research has indicated that teachers can serve as role models for readers.

IT IS IMPORTANT TO HAVE READING ACTIVITIES THAT ARE INTEGRATED INTO REGULAR CLASSROOMS AND READING TIMES BOTH FOR TEACHER ACCEPTANCE AND FOR CONTINUATION AFTER THE PROJECT.

Teachers and librarians have very busy schedules which do not allow time for "extra" activities unless they are viewed as enhancing learning and can be combined with or substituted for current activities. Even though many activities such as SSR and the teacher regularly reading aloud were preREAP in these schools, the REAP project helped to "institutionalize" the practices or gave them greater recognition. Other motivational projects such as reading Young Hoosier books or participating in the Pizza Hut's Book-It project also became part of the REAP project in some schools or were stimulated by the new REAP books. Teachers began to incorporate some of these activities in their reading requirements.

THE MAJORITY OF STUDENTS AT GRADES FOUR, FIVE AND SIX SEEM TO RESPOND FAVORABLY TO INCENTIVE AND AWARD PROGRAMS AS MOTIVATION TO READ MORE FOR ENJOYMENT.

This was an interesting finding which had to be accepted despite the evaluator's personal bias against many of these programs. Teachers consistently commented that their students were readind more when these activities were introduced and when the REAP project supported the activities. Several incentives became a matter of pride to students: having reading charts on displays, earning entrance to special reading activities; and winning monthly or year-end awards. Students knew who read the most and seemed to admire these readers. Competitions between classrooms and grades seemed to motivate many students. This finding may only be true in relationship to certain kinds of readers and needs to be explored more fully. Many very low ability readers and many gifted and talented groups did not react as favorably to the REAP books or incentive programs.

Overall, it is evident that the REAP project has definitely promoted recreational reading. Whether the effect is short-term or long-term probably depends on the continuing efforts of the schools to continue to both promote reading for enjoyment and to value this aspect of reading in the classroom and in the library.

Future Research

The REAP project has now been extended into middle schools (grades six, seven, and eight). Evaluation efforts need to be made at this level to see if the same ingredients for success in the current REAP efforts will have similar effects on the older age groups in school settings which have a very different scheduling pattern.

Because it is often the seventh grader who begins to read less for enjoyment due to the pressure of school work and social pressures, whether the REAP incentives will work with these age groups will be an important evaluation study for the future.

Specific questions which still need to be addressed with the middle grade students as well as the junior high/middle school students include:

— Are classroom collections or library collections equally as effective in motivating reading?

— Are reading award/incentive programs equally as effective with high, average, and low ability readers?

— What motivates the gifted reader? The low ability reader? The average reader?

— What classroom activities or environmental factors encourage student reading and positive attitudes towards reading?

Previous research has shown that peer interaction with books is a great influence on attitudes and skills (greater than SSR, for example). This needs to be explored further and may be especially pertinent with the young adolescent in middle school.

How to Encourage Children to Read Foreign Literature? (From the experience of the work of the children's reading room)

Olga Miaotz
Head of the section of children's reading, Rudomino All–Union state libraty of foreign literature, Moscow, USSR

In 1990 at All-Union State Library of Foreign Literature named after M.I.Rudomino a new department, Children's Reading Room, has began its work. Why was it necessary to organize such a department at the library, that previously served only adults?

First of all Library of Foreign Literature holds a sufficient amount of children's books: foreign fiction, popular science literature, and translations of foreign children's books into Russian. But so far the children's book stock of the library was not investigated, the choice of new books has been unsystematic, their informational value has not been analysed. To begin with there were organised exhibitions of children's books in the library, which helped us to investigate our children's collection.

Secondly, the fact is that children's literature departments have been closed in the leading Moscow public libraries. So sometimes it is very difficult for young readers to find a necessary book or magazine. In our library teenagers can borrow not only children's books which are at the open access in the reading-room but they can borrow any book from the main library stock. We think that the possibility to read any book at a serious research library encourages children in self-education.

Thirdly, we hope that in our department we will be able to revive the tradition of family reading. We think that a visit to the library should be a family outing, children and parents coming together to select and read books. Quite often in families parents and children have nothing to tell each other. In the library they have a unique possibility to communicate, to discuss what they have just read, to exchange their opinions, to cooperate.

Finally, at Children's Reading Room we have the possibility to prepare children for the serious work at the library.

The great amount of work was done before the opening of the new department. The special "Children program" has been elaborated. It includes not only the traditional library work with children but also lectures and seminars for children of different ages. The leading directions of the program are:

— foreign language teaching;
— seminars on history of art, literature and religion;
— art education;
— ecological education;
— the investigation of foreign pedagogical experience and its popularisation;
— information and reference service in the field of children's literature.

But in the course of our work we faced some difficulties. Most of the books (about 2/3) of Children's Reading Room are books in foreign languages: English, French, German, Spanish, Italian and some rare languages.

To read books in foreign language is not only a pleasure but a serious difficult work. It has turned our that some children are not prepeared for it. The danger is that for them our library may become a kind of book exhibition where they can take books, look through the colourfull pictures but do not read. At the same time our library differs greatly from school or comunity libraries which many children have attended before. They are not prepeared for the strict rules, for the complex procedure of book order. So a child may not get a necessary book immediately and desappointed by waiting could leave the library for ever.

Of course together with parents and teachers we may partly overcome these difficulties. We a glad to use any opportunity to cooperate with school teachers. We invite them to conduct different lessons in the library. The librarian will help them to choose necessary books to prepare for the lesson. But it is very important not to turn these seminars into odinary lectures where the main part of the work is carried out by the librarian and the teacher is concerned only with dicipline. Such lessons may be productive only of a librarian, a teacher and pupils will join their efforts. The interesting fact is that those children, who are not very well at school enjoy their studies in the library and make a great progress.

We also work with students of pedagogical colleges. We tell then about various methods of language teaching, recomend them interesting children's books, which will help them in their future work, explain how to teach foreign languages with the help of games, poems, songs and so on. We hope that on becoming teachers these students will be active readers of our library and will bring their pupils with them.

From the very beginning we've intended to conduct seminars and lectures on different languages, history of world literature and art, geography and ecology. The experience of the first year has shown that such seminars encourage children to read more books in the library. Nowdays we conduct seminars on English language for children of various age groups, lectures on foreign literature, history of arts and religion. We have architectural studio and start seminars on natural history. We intend to develop this particular aspect of our work. Our teachers use the specific possibilities of the library at their seminars. For example, they use a lot of books at the lessons, show children those books, which they can read on this or that particular subject, give children an opportunity to look through the books after the lessons to make notes and drawings. After lessons children often stay in the library and read books which they have found especially interesting. These seminars help children to become readers of our library, more than that: these seminars help us to make contacts with teachers and parents. The work in the seminars encourages children for the self-education in the library.

The books on the shelves are arranged according to the difficulty of the text. The librarian often helps a child to choose a book with an interesting plot and colourful pictures. It is very important to help a child to read his first book in foreign language. Ideally parents or a librarian start reading a book together with a child, they may explain him the meaning of unknown words because quite often a child doesn't know how to use a dictionary.

The very fact what they read "real foraign books" in English, French, German and so on is very important for children. At school they usually read adapted texts, which are as a rule retellings of the well-known children's books. In the library children often choose popular science books. As a rule these books are well illustrated. This helps children to understand the text.

At school most of the children have no practice in foreign language. There is no opportunity for them to visit different countries, to communicate with foreign speakers. Quite often children consider their studies in foreign language useless.

So it is very important for children to study not only a foreign language itself, but history and culture of the country too. Such knowledge encourage them to speak foreign language, to learn more about another people and their life, to read foreign literature. At the lessons with the small children our teachers may simply "play in a foreign country" where everything is different. (Do you remember "Alice in Wonderland"?) In England, for example, there are Queen, and fogs and double-deckers. We consider it to be very important to help our children to understand people who differ from them and to challenge their stereotypes of people from different countries. Thus the children, even very small, understand that every language is a part and indespensible foundation of culture. The more a child knows about this or that culture and country the more facinating his game becomes and he starts to enjoy his language studies.

These are some conclusons and observations which we have made from our one-year experience. Of course, not all our ideas and plans have come into practice. But the main result of our work is the following: Children's Reading Room at the Library of Foreign Literature has not become similar to children's reading rooms at other libraries. In spite of the fact that in our library there is a sufficient ammount of books in Russian (original and translated from different languages) young readers as well as adults are mainly interested in original foreign literature.

130-CHILD-7/READ-9(WS)-E

We have Read Different Tales (on value models in children's reading)

Marina Dubrovskaya
Senior researcher Lenin state library of the USSR, Moscow, USSR

One cannot overestimate the role of the book in a child's life. Even in our high-tech world the book remains a meaningful guide into experience, knowledge and values, though it has to compete with versatile dynamic mass media. Introduction into the world of book in early childhood cannot guarantee that reading will become the life-long pursuit of an individual; quite a number of factors will have to play their role for this. But what seems to be indisputable is that values brought to a child consciouness through early books stay valid for him for quite a long period of time and even for a life time.

With the view of this some findings of the Soviet-American youth poll on reading preferencies and orientations (1990) have been studied. Two groups of respondents of 14-17 years of age (100 persons in each) were polled. The study aimed among other things at finding out what early children books and characters were most memorable for the respondents, and therefore most value loaded.

It was supposed that by the age of 14-17 respondents' memory has preserved the titles and names that exercised significant influence on them, merged into their consciousness as certain value models and together with other important factors quite possibly played their role in forming of their present reading orientations and social interests.

In recent times of confrontation and creation of "enemy image" it was quite usual practice to speak of different even opposite features characterizing the peoples inhabiting these two vast countries. At present times of a warmer political climate commonalities and similarities have become a popular subject for speculations and discussion.

However, following not any ideological trend but the logics of historical and cultural develoment, one has to admit that there are no simple answers to this problem. Some similar phenomena may cause quite different results (under specific circumstances) whereas seeming similarities could originate on absolutely different basis. These issues should be analysed within historical, political and culturological studies and sociology of reading may also contribute to this effect.

The respondents of the poll were asked, what first children books and tales they remembered best of all and who were their favourite characters. The main goal of the study was not so much as to find out common titles and characters named by the two groups, but mainly similarities and diversities at a deeper, value level.

About 20 titles mentioned not less than by 5 respondents in each group were singled out. They allow for looking into most general tendencies. Popular characters confirm these tendencies, cumulating value orientations acquired at the early age.

The Soviet respondents showed preference for collective wording in their answers (e.g. Pushkin tales, Barto nursery rhymes), whereas the Americans tended to name specific titles. This of course presented certain difficulties for the analysis. This is why it was so important to find out about their favourite characters that actually represent certain value models.

Therefore, we have got two lists of titles with quite conspicuous diversities. The Soviet list is characterized by noticable preponderence of Russian folk-love. (More than half of the respondents mentioned Russian folk tales in their answers).

Love for the folk tale is traditional for the culture of this country. Cummulating people's wisdom and ideals it passes them from generation to generation. Also important is that the folk tale connecting basic human values and traditional national ones presents continuous tradition in itself; unlike literature of other genres it can be less influenced by ideological dogmata. All this and its bond with oral tradition provide for its stable position in our culture.

Often mentioned were also Pushkin tales (27)*,Ural tales by Bazhov (5), Bylinas (Russian epics) (5), Konjok-Gorbunok by Ershov (5) and folk tales by the peoples of the USSR (6).

[* Numbers in brackets indicate the number of respondents who mentioned a certain title or character.] The genre of the tale in general dominates the Soviet list. Also quite often mentioned were fairy tales by Andersen (31), by Perrault (24), by Brothers Grimm (8).

Most commonly mentioned specific titles were "Repka" ("The Turnip"), "Kolobok" ("The Ginger Bread Man"), "Little Red Riding Hood", "Cinderella", "Sleeping Beauty".

Three latter titles are mostly perceived absolutely cut off their original authors and exist in the mind of the respondents (as well as in public consciousness in general) outside national culture that gave birth to them.

I have already mentioned that the favourite characters named by the respondents better allowed for the analysis of value models than the titles themselves becauuse one could concentrate attention on what specifically was consciously or subconsciouaiy

preserved by the memory of the young adults. When speaking of tales one has to pay attention to the idea of "reward", namely — who gets what in the end, since only commonly valued qualities and characteristics are being rewarded in the traditional tales.

Thus, for example, in Russian folk tale reward is rarely connected with active actions, let them even be aimed at positive goals; diligence, industriosness, persistance and accuracy are not among the first rewarded characteristics.

Luc and happiness are usually given to simple, seemingly good-for-nothing people, who turn to be worthy and noble at the same time. Their human qualities: kindness, gentleness, along with passivity in awating their fate account for their future happiness.

This value model seemed to be quite popular with the respondets, since Ivanushka — the Simpleton and Ivan-Tzarevich, the main bearers of these qualities, hold the third place among favourite characters mentioned (18).

The personage forming the other, complementary part of this value-model is also mentioned by the respondents. This is Vasilisa the Beautiful, Vasilisa the Wise (7). This character implies the idea of reward for the main hero. She acts not as some outside factor (Deus ex machina), but as an active positive source of energy, possessing along with the magic qualities most valued human ones, such as wisdom, sagacity, devotion. Personified in a powerful and at the same time caring and devoted woman, the fate appears as "an ordinary miracle" for the hero. She chooses the right man, shows him the way to happiness and rewards him for taking this route.

We are introduced to these relations of the human being and the Fate since our early childhood. It is small wonder, that one of the most popular fairy tales heroine with the Soviet respondents is Andersen's Thumbelyna, whose life story complies perfectly with this model; carried away by the Fate that manifests itself in a series of tryings, this tiny unprotected creature is being led to her unknown happiness, offering neither resistance nor any assistance to the Fate.

Likewise the story of Cinderella, most popular heroine, may be uderstood along the same lines — happiness is given to a shy, unprotected, hard-working girl.

It is curious, that in Russian folk-tales rewarded male characters are quite passive, lacking leadership, whereas female characters are active and industrious. When the traditional hero is on his quest for happiness his fate quite often appears to him as a feminine creature, be it a Golden Fish, a Pike, Vasilisa the Wise or Baba-Jaga (The Witch). Such virtue as diligence is not necesserily his strong point-he is rewarded mostly for his kindness, simplicity, faithfulness and courage.

However, when the fate tries a heroine, diligence, industriousness appear to be absolutely necessary qualities for being rewarded, along with honesty, unprotectedness, kindness, faithfulness.

A very important tendency in value orientations of the Soviet kind introduced trough children books is aspiration for heroism, nobleness and strength. Heroes possessing these qualities are quite frequently mentioned by the respondents (33). Taking into account that Ivan Tzarevich also manifests these qualities quite often, one can be assured than these values are very significant for the respondents.

Besides folk and fairy tales the Soviet list contains rhymes by K.Chukovsky (21), rhymes by A.Barto (12), rhymes by Marshak (12), rhymes by S.Mikhalkov (7), "Adventures of Buratino" by A.Tolstoy (14), "Adventures of Chippolino" by G.Rodari (10), "The Wizard of the Emerald Town" by A.Volkov (9), books by N.Nosov (8), A.Gaidar (7), "Maugli" by R.Kipling (5).

Most popular characters according to the study findings are: Cinderella (24), Buratino (22), Ivan — the Simpleton (Ivan-Tzarevich) (18), herous symbolizing hobility, strength, faithfulness (17) Karlson (18), Thumbelyna (13), Little Red Riding Hood (12), heroes from Russian epics (9), Snowwhite (7), Winnie-the-Pooh (9), Chipollino (9), Gerda (9), Vasilisa the Wise (the Beautiful) (7), Dr. Aibolit (7)*, Cheburashka (Topple) (6)**, Alice (from "Alice' in Wonderland") (5), Puss in Boots (5), Little Mermaid (5).

[* A character from K.Chukovsky's book "Doctor Aibolit".]

[** A character from E.Uspensky's book "A Topple and a Crocodile".] This list of children fiction titles is closely connected with the western culture, probably with the exception of books by A.Gaidar and N.Nosov.

A.Tolstoy and A.Volkov based their books on the plots actually borrowed from the western literature, "Pinocchio"

by C.Colodi and "The Wizard of Oz" by L.F.Baum, correspondingly.

Favourite children poets — S.Marshak, K.Chukovsky, A.Barto were brilliant translators of western poetry for children.

Early exposure to the foreign literature expand a young reader's horizon, introduces new characters to him. Together with the personages of his native literature they enter the child's life constituting his cultural world. Each character bears certain valued qualities. Thus, for example, some of them are carefree, joyful creatures (Buratino, Neznaika /Know-Nothing from N.Nosov's book "Adventures of Neznaika"), others are true devoted friends ready to come to people's rescue (Dr. Aibolit, Gerda, Chipollino).

Children can find certain compensatory sides in their favourite characters.

Quite positive and beloved personages can possess the same short comings as a young reader himself does. And whereas the child is reproached for these qualities, he feels they are in a way justifie by the fiction characters.

And of course, what is also very important in most of the books mentioned, is their appeal to ever-existing children's lust for miracles and magic (that, brings the child's consciousness closer to folk-lore). Value models represented in these books are quite different: The Golden Key in Buratino's hands is the same traditional reward to the simpleton: reward in "The Wizard of the Emerald Town" is self-realization of the characters, books about Karlson comply with the child's need for a true friend, for something unusual, and they have also compensatory side for the young mischievous readers. "Adventures of Chipollino" and books by A.Gaidar postulate the value of friendship and heroic deeds (from rather specific ideological positions, though).

Let us turn now to the American list. Unlike the Soviet one, it does not have any national folk tales. As for the favourite children fairy tales by Andersen, Brothers Grimm, or Perrault, they are practically never attributed to their original authors. On the one hand this occurs due to the fact that American chidren get mostly retold versions and not classical translations, on the other hand, it can also be accounted for by mass media influence that will be discussed later.

Most popular titles are: "Cinderella" (37) (the indisputable leader with the girls of both groups polled), "Snowwhite" (25), "Ugly Duckling" (9), "Three Billy Goats Gruff" (9), "Goldilocks and three bears" (8), "Sleeping Beauty" (8), "Mother Coose" or rhymes from it (16).

Most popular folk hero mentioned is Paul Bunyan (5), the giant woodcutter from the Canadian and North American forests.

The American list contains two names that seem to be most important for the children culture in general and for reading in particular. These are Walt Disney and Dr. Seuss[1].

Walt Disney in an insepparable part of the American culture, he serves as its representative, its symbol. According to the findings of the oral poll of the young Soviet participants to the Soviet-American Reading Conference[2], Disney's name was mentioned among the first 10 phenimena, that Soviet teenagers associated with the USA.

Disney's influence on the children's reading is so wide and deep, especially in the domain of the fairy tales, that one may attribute the popularity of such characters as Cinderella, Snowwhite or Pinocchio not so much to the books, but to the films based on their plots. In his review for "The School Librarian" Marcus Crouch writes; "Pinocchio is one of those great books which every one knows and no one at least in this country, has read. The fame of Disney film which bears only a passing likeness to its original, has eclipsed the story"[3].

Having mentioned Disney's influence on children's reading one cannot avoid saying a few words of mass media influence on it in general.

Thus, in early 70-ies Tom Devenport screened classic tales "Hans and Gretel", "Rapuntzel", "The King-Frog" (and these are the very titles frequently met in American respondents' answers).

According to American experts[4], since mid-80-ies the revival of interest to the fairy tale has started in the USA, and a stream of screen versions actually floodes the screen. Of great success is said to be Shelly Dewell's "Theatre of Fairy Tales" where quite prominent American actors are featured. Among these productions are "Sleeping Beauty", "Hans and Gretel", again the titles mentioned by the respondents.

Therefore, one cannot be completely convinced whether it was a book or a screen version that the respondents actually meant answering the questions.

Among top-popular titles of the American list one finds 2 books by Dr. Seuss, "Cat in the Hat" (38) and "Green eggs and Ham" (38). Judging by this very list, on the whole Dr. Seuss's books can even comete with W.Disney's books in popularity. Other respectively often met titles are: "Clifford the Red Dog" by N.Bridwell (24), "Little engine that could" by W.Piper (18), "Curious George" by G.A.Rey (17), "Winnie-the Pooh" by A.A.Milne (9).

Among the favourite characters are: Cinderella (29), Clifford from "Cliffdord, the Red Dog" by N.Bridwell (19), monkey George from books by G.A.Rey (16), Cat from "Cat in the Hat" by D.Seuss (12), Snowwhite (12), Micky Mouse (10), Doupy from "Snowwhite" (7), Sam from "Green eggs and ham" by Dr. Seuss (7), Sleeping Beauty (5), Winnie-the Pooh (5).

What do these characters represent? What qualities appeared to be valued by the young American readers?

Resourcefullness, dynamism, intentiveness, mischievousness of Micky Mouse, Sam and Cat; sentimentalism of the stories about Cinderella and Sleeping Beauty; touching persistance of the Little Engine, carefree mischievousness of George, faithfulness and kindness of Clifford, power, strength and diligence of Paul Bunyan.

It seems quite curious, that both groups of respondents (in their female-part, though) named Cinderella as the best loved heroine.

She became a sort of transnational symbol, a universal model according to which the worthiest is sure to be rewarded.

Each nation attributes to the plot of this story its own traditional values: industriousness and modesty-the puritan virtues — are rewarded in the end; good luck and happiness come to the poor, hard-working, unprotected girl according to the national Russian tradition; and it is not by a mere chance that "Cinderella" is identified with "the American Dream" of Swift rise up the social and economic scale out of most deplorable position.

Discussing this point with one of our American colleagues, I learnt an interesting opinion: it may as well be diligence and kindness that are rewarded in "Cinderella", but her popularity among the American girls is accounted by her good looks.

It can certainly be true, and in this case mass media has contributed considerable to this effect.

Since it was decided from the start to discuss in this paper the titles and characters of early reading period most frequently met in the respondents' answers, quite a number of titles not less popular with the American teenagers were not discussed here, such as books by J.Blume, D.Sobol, mystery series for boys by F.Dikson, and girls by C.Keene, books for teenagers by W.Rawls and many others, less often met in the respondents answers, but providing rich material for discussion on value- and role-models.

Anyway, the lists discussed here show, that inspite of all their differences, that reflect historical, traditional and modern influences, early children books impose quite similar values on the young readers' consiousness oriented at kindness, friendly human relations, positive optimistic attitude.

Folk heroes and fiction characters that came to be popular with the Soviet and American children, bear "positive charge", so to say, and being even far from "ideal" they have this important attitude in common.

Such attitude accounts for genuine wisdom of this literature. "Positive charge" introduced by it into the child's consciouness serves as a sort of protective mechanism for him.

And let the young person discover further the world of human relations, and let him be confronted by different, even opposite value systems, it is very important that this positive attitude should never leave him.

The words by a famous American tale-teller James Thurber seen very appropriate in this respect:

What's black is white,
What's red is blue,
What's dark is light,
What's true is true![5]

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121-DOCCHIL-1(WS)-E

Children's Literature Documentation Centres in the USSR: the Present-Day Situation and the Trends of Development

Yu. Prosalkova
Senior researcher, Lenin state library of the USSR, Moscow, USSR

International practice has seen the traditions of setting up children's literature documentation centres and their functioning. These are institutions that acquire, store, classify, study etc literature, printed materials for children and young adults, carry out research and educational activities. Thus they accumulate book culture created by the people, by the nation,by society for coming generations as well as human knowledge of past and present in this field. International children's literature documentation centres carry out this function concentrating their attention upon values created in the whole world.

In the USSR the Departament of children's literature in Vilnius at the National Library of Lithuania might be regarded as an analogue of international practice of children's literature documentation storage centres at national libraries. For more than 15 years such a department existed at the National Library of Estonia in Tallinn. The existing Estonian republican children's library was established on the basis of this department. Up to mid-sixties the department of children's literature existed in the Lenin State Library.

The type of these institutions, as it seems to us is connected not only with cultural traditions, but also, to a certain extent, with the structure of institutions of children's reading, of children's literature, of public libraries for children in this or that country.

Soviet structures differ from those in the countries of Western Europe or the USA where there are no networks of independent public (or, according to Soviet terminology, mass) libraries for children which can be also regarded as regional institutions of children's literature documentation, of its acquisition, storage, popularization etc.

The Soviet system of independent public libraries for children has a definite structure at a district, city, regional, republican level children's libraries (with the book stock up to 400 thousand copies) have the status of regional deposits of printed materials for children and young adults published in the country and, in the first turn of national children's literature and publications for children in the language of the aboriginal population of the territory.

Another peculiarity is, that in the USSR (whether it is good or bad is of no importance within the given context, such is the reality) the republican children's library besides the storage of national literature, performs the function of a methodological, research, information, consultative centre, a centre preparing bibliographies of recommended children's literature and a public library for the children of the community where it is situated serving also specialists and those interested in this field of culture in the republic. This type of children's library within the structure of institutions of children's reading may be called "national library of children's literature."

These libraries publish the national bibliography of children's literature (information and retrospective bibliographies as well as those of recommended literature), carry out surveys of children's reading at the regional level, take part in the All-Union surveys and research activities etc.

Almost all of these libraries obtain the legal deposit of children's books published in the republic and in the country. Unfortunately this system is not perfect in everything, it has certain breaches and rather serious problems.

The functions of a republican children's library has determined the structure of its reference system. It consists of two mutually complementary parts and is subdivided into those for professional use and for readers. The first one is for specialists, it is more complete, including the whole of the stock, embracing both books and non-printed materials connected with children's books and children's reading, with social functions of children's books and their impact on the intellectual and spiritual development of the coming generations. The second part of the reference system is meant for children. It embraces only the "children's" part of stock, i.e. children's books, and it is detailed carefully, especially in its subject part. Specialists use both parts of the reference system, while the children use mostly the one meant for them. The availability of necessary information from the specialised or professional part of the reference system for children and young adults is provided by the reference librarian. As a rule, the reference system of the republican children's library is bilingual.

As centres of children's literature documentation, children's reading and library services for children repulican children's libraries carry out bibliographic research in the field of children's literature and children's book publishing. The result if this research is also aimed for specialists. A consdierable part of this research activity results in compiling bibliographies of recommended literature for children and young adults. This trend of bibliographic research has lasting traditions in the USSR.

Besides, though all printed materials for children are included in the bibliographic publications of the All-Union Book Chamber and the book chambers of union republics, children's libraries of republics engage in bibliographic activities within the framework of their function. They compile information and bibliographic lists of children's books and literatury criticism in national languages embracing publications included in the current bibliography, mass information bibliography, retrospective bibliography, bibliography of recommended literature and biobibliography.

But the republican children's library as socio-cultural institution aimed at meeting reading demands of the younger generation at the development of problems of library and book science, sociology and methodology in this field, does not cope with the problems of children's literature, its theory, history, its present state and the analysis of its trends etc. There is no centre co-ordinating research activities in children's literature carried out by houses of children's books, chairs of children's literature and library services for children in higher educational institutions. To a certain extent the tasks of such a centre are fulfilled by the only magazine in the USSR on the given problem, the "Children's literature" that gathers experience in the given field of culture.

In the thirties, when the first specialized publishing house of children's literature DETGIZ was established in the USSR (at present this publishing house called DETSKAYA LITERATURA (Children's Literature) functions within the jurisdiction of the Russian Federation), it was meant that Houses of Children's Book, and, in particular, the oldest one in Moscow (such houses were later established in Leningrad, Kiev and Tbilisi) will play the part of children's literature documentation centres. The activities of the Houses of Children's Book proved to be a success. Later, as the network of children's libraries of union republics had been developed, national deposits of children's books had been established, Houses of Children's Book turned into departments of specialized publishing houses of children's literature and their activities were reduced to the scope of the given publishing house while the analysis of the children's literature, both native and foreign, came to be regarded as a background. But it should be mentioned that these are experts of these very institutions that engage in research and development of the problems of the children's literature. The research, information, consultative and bibliographic functions of children's libraries of union republics are chiefly connected with library and book science (in the libraries having departments of rare children's books, as in the Ukrainan Library for Children in Kiev), with children's reading and library services for children.

In 1921 the Institute of children's reading was established in the USSR and existed up to 1925. The activities if its staff resulted in valuable works on the history of Russian children's books and bibliographic sources.

Such is the background and the present-day situation as far as Children's Literature Documentation Centres in the USSR are concerned. And it might be concluded that the system and structure of these Centres in the USSR have been astablished in accordance with the national and territorial peculiaities of this country.

The question is, whether there exists a then All-Union children's literature documentation storage centre. The Lenin State Library, according to its status of the All-Union national library obtains the legal deposit of children's books published in the USSR. It boasts of unique and comprehensive collections of classical, contemporary Soviet (in many languages of the peoples of the USSR) and foreign (in Russian, in Soviet national and foreign languages) children's books that grow and extend continually. These collections, as well as those of materials directly connected with the development of book culture for children and young adults, are the most comprehensive in the country. These collections are reflected in the inified system and structure of the reference and information system of the Library. They are available to everyone interested in this sphere of culture in the USSR and in the world. Leading experts of the country work in the Lenin State Library. They analyse library practice, work out methodological principles and recommendation, study sociological aspects of children's reading, conduct research etc.

All activities connected with the book culture for children are determined by the structure and functions of the Lenin State Library and, consequently, the sphere of these activities is limited. Unfortunately, the structure of the National Library of the USSR does not stipulate (as, for example, the Library of Congress in the USA) the Department of children's Literature which would function as Centre of children's literature, children's reading and the problems of library services for children, which would be of major importance in the concentration of knowledge, of scientific potential in this sphere aimed at shaping the spiritual and intellectual image of the future society, of today's children and young adults whom we call "younger generation".

This report neither sets up problems nor suggests any methodological approach; it just gives information on the state of things. But it seems to us that detailed analytical information is one of the ways of exchange of experience, of finding better solution to problems of common interest, and, consequently, of professional co-operation.

12-BLIND-2/INTL-2(WS)-E

The National Library Service for the Blind and Physically Handicapped, Library of Congress, United States of America, and The Sharing of Special–Media Materials among Libraries — Sale, Loan, Exchange and Gift

James Herndon,
Tom Martin,
Henry Paris
Library of Congress, Washington DC, USA

Abstract

The international sharing of braille and audio books and magazines among libraries and organizations for the blind is an important factor in exanding the universe of reading available to blind and physically handicapped persons. The sharing of such materials generally takes the form of interlending of books or of permanent acquisition of books and magazines through purchase or gift and exchange arrangements.

This article discusses the pros and cons of the purchase, loan, exchange and donation of braille and audio books and magazines, with particular reference to the experience of the Library of Congress National Library Service for the Blind and Physically Handicapped.

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Throughout the world most libraries for blind and physically handicapped persons produce braille or recorded books for their readers. These libraries often supplement their production of materials by acquiring special-media books and magazines from other libraries and organizations. In turn, they often share their own audio and braille productions with other libraries for blind and physically handicapped readers.

Sharing special-media materials among libraries for blind and physically handicapped readers is an important way in which a wider range of materials can be made available to persons who do not ordinarily have access to the printed word. Since any given library can produce only a small percentage of braille or audio books compared to the total print output, it is desirable that the collections of all libraries for the blind be open to eligible persons everywhere in order to expand the universe of available reading. Print-handicapped readers often depend on having access to several special-media collections to round out their reading. One notable case in point is the relationship between Canada and the United States. Canadians purchase many special-media books produced in the United States for a large percentage of their reading materials, Americans also have access to Canadian books, such as Frenchlanguage talking books that are not produced in the United States.

The sharing of special-media materials among libraries normally takes the form of acquiring specific titles though purchase, loan, or exchange and gift arrangements. Each of these methods of acquisition has its advantages and disadvantages.

Purchase of Braille and Audio Books

Purchase is the most effective and straightforward means of acquiring special-media materials from other libraries and organizations for the blind. The advantage is that purchased material can be added to the permanent collections of the purchasing library and circulated continuously to readers. Generally copies of the books can be purchased as soon as they are produced, giving the readers of the purchasing library a timely access to current literature. The most significant problem with the purchase of materials is the cost. Even when sold "at cost" the purchasing organization generally has limited funds for that perpose. Certainly, funding is a serious limiting factor for libraries in developing coutries that wish to share in the reading of special-media materials.

Nevertheless the purchase of special-media materials has the greatest potential in expanding the collections of libraries that have funds for acquisition. Libraries in the developed countries of Europe, North America, and the British Commonwealth rely on purchase as an integral part of collection development.

The sale of special-media materials can be a simple transaction or a complicated one. Some organizations sell their books freely with no apparent restrictions, indeed some organizations appear to rely on book sales for their operating income. Other producers can sell their books only by special arrangements to conform with existing laws and regulations that govern the disposition of such materials. A few libraries are prohibited outright from the sale of reading matter for blind and physically handicapped persons.

In some countries questions of copyright and intellectual property have an important bearing on the production as well as the sale of special-media books. The legal nonprofit status of many special libraries may also impinge upon the sale of books abroad. In those countries where complications arise in selling special-media materials, vendor libraries develop procedures that will allow the sale of books in accordance with national copyright laws or organizational policies. For example, in the German-speaking countries of Europe, there are national regulations permitting special libraries in those countries to produce audio books of any titles published in those countries without having to clear copyright for each individual title. These laws apply to libraries that form the Association of German Talking Book Libraries which are permitted to sell copies of their audio books to each other. Libraries in this Association circulate lists of talking books in progress and for sale to member libraries. Any library wishing to purchase books from the member libraries of this Association must technically join the Association as a full or associate member. The Association originally included the German-speaking countries of Europe (Germany, Austria, Switzerland) but has now expanded to include libraries in other countries such as the Nethterlands, Sweden, France, South Africa, and the United States. In this way the libraries of the Association can share their books with libraries in other countries without contravening national copyright laws.

Procedures enabling special libraries to purchase audio and braille books produced by the Library of Congress, NLS/BPH, are even more involved. The production of books by NLS is extremely sensitive to copyright requirements. Unlike many European countries, the United States has no special law or regulations that permit the production of special-format editions of copyrighted works by a designated producer. Almost all books produced by NLS must be individually approved by the copyright owners. NLS goes to great lengths to protect the interest of copyright owners by ensuring that recorded and braille books are restricted to the use of eligible blind and physically handicapped citizens and residents of the United States. In addition to copyright consideration, the nonprofit status of NLS prohibits NLS from making sales. However, despite these restrictions, NLS has developed procedures permitting foreign libraries to purchase from producing contractors, at cost, copies of NLS-produced books.

Procedures for the Purchase of NLS Audio and Braille Books

Foreign libraries and organizations that serve the reading needs of blind and physically handicapped persons may make arrangement to purchase for their permanent collections the braille and recorded books produced by NLS. In order to purchase books, the prospective purchaser must negotiate a formal agreement with NLS. The prospective purchasing organization must fill in the contact making changes that conform with the policies of that organization. The agreement must then be signed and presented to the director of NLS, who, upon approval of the agreement will countersign it and return a copy to the purchasing organization. Once the agreement has been signed by NLS, the purchasing library is authorized to purchase recorded and braille books from NLS book producers at a cost not less than the cost to NLS. The agreement is for a two-year period. At the end of that time, the agreement must be renegotiated for a subsequent two-year period . Once the agreement is in place, NLS sends monthy lists of available titles to the purchasing agency. In order to buy spesific NLS tiles, the agreement requires the purchasing library to first obtain permission from the copyright holder of the original ink-print work, since NLS originally cleared the title for distribution only to citizens and residents of the United States. Once the purchasing library obtains written permission from the copyright holder to use NLS-produced books, it submits to NLS an order for the book accompanied by the written permission. NLS will check the permission and then forward the book order and the permission to the appropriate organization producing the book for NLS. It is important to recognize that NLS contracts with a number of private sector organizations for the production of its recorded and braille books, and the actual sale of the books is a transaction between the NLS-contracted producer and the purchasing library. The producer and the purchasing library must negotiate matters concerning the actual sale of the book, including cost, number of copies, and method of delivery. Since the sale of NLS books to overseas libraries is a trasaction involving the NLS producer and the purchasing library, NLS itself is not involved in the actual sale of the books and therefore does not violate the nonprofit nature of the NLS program. The role of NLS in this transaction is to ensure that copyright is protected and to inform purchasing libraries of the titles that are available for purchase.

NLS currently has book purchase agreements with libraries in Australia, Canada, Great Britain, Hong Kong, Jamaica, New Zealand, Peru, and South Africa.

Purchase of Special-Media Books by NLS

In addition to making its own materials available for sale to foreign libraries for the blind and physically handicapped persons, NLS also buys a large quantity of braille and audio book titles from libraries abroad. In recent years NLS has purchased material from libraries in Australia, Canada, Great Britain, Germany, Hong Kong, Italy, New Zeland, South Africa, Spain, and Switzerland. Talking books from special libraries in Poland and Yugoslavia have been purchased through third-party vendors, and NLS is currently making arrangements to purchase materials from the Soviet Union. Books purchased from abroad by NLS are placed in a Special Foreign Library Collection for circulation to NLS readers. This collection now holds over 3,000 titles.

International Interlibrary Loan/Exchange and Gift

Although the purchase of special-media materials between libraries for the blind is the most effective means of charing materials, it is not an option available to libraries that lack funding for this purpose. Libraries in developing countries normally fall into this category. These libraries must avail themselves of other methods of sharing such as international interlibrary loan or through exchange and gift arrangements.

International interlibrary loan is an effective means of sharing special-media materials among libraries. Unlike loans between regular libraries that are normally occasional and for special purposes, loans between special-media libraries can be an important factor in providing reading services to blind and physically handicapped persons. Many libraries around the world rely on borrowing materials as a significant supplement to their reading service. The great advantage of loans is that a wide range of materials can be offered directly from the collections of the lending libraries at no cost to borrowing libraries. The great disadvantage is that borrowed materials must be returned and cannot be added to the permanent collections of the borrowing library. Because of copyright regulations, loaned materials cannot be legally copied by the borrowing library. Also, the double sending of the loaned items through the international mails increases the chances of its loss in transit. Most libraries lend special-format materials directly to blind and physically handicapped individuals in other countries. In some cases, such as that of NLS, loans abroad can be made to foreign libraries, schools, and other organizations for blind persons but not directly to individuals. As a case in point, NLS sends audio books on loan to Mexico on a regular basis. These books are addressed to the Comite Internacional por Ciegos in Mexico City, but because of the unreliability of the international mails, special arrangements are made to send loaned books via the U.S. State Department to the Benjamin Franklin Library in Mexico City. The Comite Internacional por Ciegos then picks up materials from the Benjamin Franklin Library and circulates the materials to interested readers in Mexico. Materials are returned in the same manner.

Exchange and gift arrangements are another means by which special materials can be shared internationally, and these arrangements have the most application in undeveloped countries that wish to acquire permanent collections. Many organizations donate materials to libraries ansd schools in underdeveloped countries. In some cases, braille presses circulate braille magazines internationally as gifts. Some braille presses also donate new braille titles internationally. However, most materials made available on an exchange or gift basis are surplus materials no longer needed by the donating library. NLS now uses it surplus braille books for exchange purposes, but is not permitted to exchange its audio books. Recently arrangements have been made to make NLS braille and recorded magazines available on an exchange basis to libraries and organizations abroad that serve blind and physically handicapped persons. NLS is not permitted to donate materials to libraries abroad, but will often act as a contact point for other libraries in the United States that wish to donate braille or recorded materials abroad.

Barriers to the International Sharing of Special-Media Materials

A high degree of sharing special-media materials among nations is desirable for the benefit of print-handicapped readers. Many libraries are working toward the development of programs to sell, loan, exchange, or donate materials abroad. However the extent to which these materials can be circulated internationally varies greatly due to technological, economic, legal and political factors; these include differing formats, costs of materials, customs and postal regulations and copyright laws. The elimination of these barriers countinues to be one of the major goals of the IFLA Section of Libraries for the Blind.

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International Interlending of Materials in Alternate Formats: Planning and Exicuting a Worldwide Project

Bruce E. Massis
Director of Library Services, JG Cassette Library, New York, U.S.A.

ABSTRACT:

«During times of global instability and recession, as well as shifting populations around the world, it becomes necessary for libraries serving blind and print-impaired persons to expand their collections without incurring extra costs. Interlending of materials in alternate formats (braille, audio and large print) in other languages than that of country's native speakers becomes increasingly important. The IFLA Section of Libraries for the Blibd has undertaken the start of a worldwide project that will make these materials more accessible. This paper examines the goals, objectives and initial groundwork in originating such a project.»

It is a sobering reality that when funding is in short supply, as it has been during the passed several years, initial services either downsized or eliminated altogether are educational and social services. In terms of the monetary impact on a nation's deficit budget, reduction of these «Human Services» has little actual visibility. But the real impact on the people served by these programs and services can be devastating. Since such services directly affect the «quality of life» of a populace, it is puzzling and disheartening to stand helplessly by as the budget exe falls.

As the global recession deepens, it has been necessary for those entrusted with providing quality library service to use more creative means by which to stabilize, if not expand, acceptable service levels in libraries of all nations. Increasingly, the means of choice for accomplishing this is through resource sharing (interlending), a virtually essential service under adverse economic conditions.

Secondarily, the multi-cultural shift of populations around the world has had a major impact on the multiplicity of languages that must be represented in a library's collection if it is to better serve its patrons. Therefore, books in other than a country's native language have garnered expanded shelf space on library shelves. The need for interlending has grown with this increased multi-lingual patronage. For those people requiring reading materials in alternate formats (braille, recordings and large print), this need is even more acute.

Recognizing the situation, the IFLA Section of Libraries for the Blind began investigating the availability of materials in alternate formats in libraries willing to interlend and receive materials and who would eventually become engaged in a tightly-knit network of participating libraries. Although these activities were being accomplished on a limited basis, the section agreed that a more atendardized and cooperative system was worth investigating.

The project got underway with the desing of the first (of what will be several) questionnaires. The questionnaire was mailed to 260 libraries serving the blind and print- handicapped. Useable responses were received from some 27 countries. Seven questions comprised the survey. These and their selected responses follow.

1) What union lists, catalogues, published catalogues, or other lists exist in your country to help you find library materials for blind and visually impaired persons?

Answers ranged from Union Catalogues (general available through national Libraries). Other libraries maintained compiled lists, computerized catalogues, self-published catalogues and lists published on a regular or semi-regular access to these materials was acknowledged.

4) How are library materials shared locally, regionally or nationally in your country?

Libraries who responded, with the exception of Japan, New Zealand and Australia perferred to serve patrons directly. Resource sharing seemed to operate best in the above three countries on a inter-library loan basis.

5) Do you know of any institutions in your country which are willing to lend library materials for blind and visually impaired persons in another country? 6) Do you know any institutions which will act as a contact point for international interlending of library materials for blind and visually impaired persons?

The key questions. Obviously, in the end, this is the information of most importance to libraries willing to participate in international interlending. These questions, posing the most practical impact of the survey elicited a positive response from 17 of the twenty seven respondents. Of the ten respondents whose answer was negative or non-commital, three countries mentioned they would become involved if there was a cooperative agreement established as a result of the actions of the Section's work.

7) Do you have any additional information which will help us understand the ways that library materials are shared within your country?

This «open-ended» question engendered numerous responses. Some of the more interesting ones included:

FINLAND — 70% of materials are on Clarke and Smith Cassettes NETHERLANDS — In order to process loan requests, that request is forwarded from one library to another until it is filled. NORWAY — Library materials for the blind and visually handicapped are not registered in the National Bibliography because they are not considered primary or original material. (This is so in other countries as well). TURKEY — All braille books except text books are type-written because of the lack of a printing house for these materials.

While acknowledging that responses received from this questionnaire would serve as an information-base to design follow-up questionnaires, countries who did not initially participate in responding to the first questionnaire would have to be contacted in order to obtain a much more well-rounded and comprehensive result. The first «Asian Seminar of Libraries Serving the Visually Handicapped in Developing Countries» offered a perfect opportunity to interest these countries in this effort. Due to the financial condition of the developing countries present, such an interlending system as the one envisioned by the Section would benefit these countries immeasureably. During formal and informal sessions on «resource Sharing», the importance of interlending was discussed and the interest generated by these sessions succeded in adding an additional 16 nations to which the questionnaire could be sent. An analysis of these responses will appear in the final text of this project.

As the project expanded and the information gathered necessitated continued international communication and information analysis, it became imperative to seek a funding source to cover the project costs. Thus, an application was submitted to IFLA to receive a «Robert Vosper Fellowship». This fellowship, which enables the recipient to work «on an activity linked with the development and operation of one of IFLA's core programmes», would offer the opportunity to coordinate the Section's work in this area with the IFLA core programme of Universal Availability of Publications (UAP). The UAP programme «promotes access and availability of library materials to all categories of users by encouraging and improving policies and procedures for the production and distribution, acquisition, retention and interlibrary supply of publications within and between countries». In working toward eliminating interlending barriers for materials in alternate formats, the Section is proud to cooperate with the UAP office to expand and solidify its goals in this area.

Regarding scope expansion of this project, it was learned that, at a meeting of the Conference of Directors of National Libraries (CDNL), that an effort was being made to facilitate international lending of materials for use by disabled persons. A working group had been formed and requested to develop their own questionnare which would serve as a means of compiling information from CDNL members on the current status in each of their countries of access mechanisms, lending restrictions, copyright provisions, technical requirements, etc., many of the areas in which our project had interest. The approach of the CDNL questionnare woul be to gain information in this area that would specifically have a bearing on international interlending of special format materials through National Libraries.

Thus, in conjuction with our own effort, a questionnaire was designed with the cooperation of our Section and the CDNL and distrbitued to the 78 members of CDNL. The results of this questionnaire will serve as additional information that will prove useful in our ongoing efforts. The questions comprising this questionnaire are as follows: 1) Do national union catalogues or national bibliographies of special format material exist in your country? 2) If the answer to question #1 is «Yes»:

a) How comprehensive is their coverage?

b) Who is responsible for their compilation and maintenance?

3) Are there any restrictions on interlending of special format materials that might impede international loans?

4) If the answer to question #3 is «Yes», what kind of restrictions?

5) Are the physical and technical characteristics of such materials sufficiently standardized to permit the easy use of material borrowed from another country? (E.G. do you use 2-track, 4-track or Clarke and Smith cassettes for audio books; contracted (Grade 1 or 2) or uncontracted braille (Grade 3).

6) Is the national library in the position to support the responsibility of administering international loans of special format materials?

7) If the answer to question #6 is «No», are there any other national bodies or institutions in your country that are responsible for special format materials?

This survey, along with additional components of this project will all lead to answers to the two most important questions posed by librarians in the position of involving their libraries in the international interlending effort: «Who has the materials my patrons need?» and «How can I obtain them?» Through this project, we are secure in the knowledge that the end-product of this effort will be a useful reference tool for libraries, who serve blind and visually handicapped patrons, with materials in their own languages, and in an accessible alternate format.

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Vers une plus grande transparence administrative

Lydia Merigot
Sous-directeur de la documentation, La Documentation Française, Paris, France

Abstract

L'évolution vers une plus drande transparence a été significative en France depuis une dizaine d'années. Elle s'est traduite par l'adoption de lois fondamentales instituant le droit à l'information du citoyen: la loi du 17 juillet 1978 consacre le droit d'accès aux documents administratifs, la loi du 6 janvier 1978 établit les règles d'utilisation des fichiers informatisés contenant des informations nominatives relatives à des personnes physiques.

L'application de ces lois est contrôlée par deux autorités administratives indépendantes: la CADA, chargée de veiller au respect de la liberté d'accès aux documents administratifs, et la CNIL, chargée de contrôler les applications de l'informatique aux traitement des informations nominatives. D'autres mesures sont venues compléter ces dispositions: motivation des décisions administratives, loi sur les archives ...

Ce mouvement vers une plus grande transparence administrative ne se traduit pas seulement par des avancées législatives ou réglementaires mais s'accompagne de mesures tendant à une meilleure information du citoyen sur l'activité de l'administration : publicité des décisions administratives en utillisant les technologies nouvelles telles que le vidéotex ; sur ses droits : mise en place d'une politique d'information de l'usager avec les CIRA et la mise en oeuvre d'un système d'information administrative télématique en matière de droits et démarches.

C'est un vaste sujet, projet même, qui a été proposé et qui peut être envisagé de plusieurs manières : d'une manière "classique" — si j'ose dire — en soulignant l'aspect de recensement et de signalement des publications administratives : comment les documents administratifs sont-ils publiés et quels instruments éventuels permettent de les repérer ?

Je ne privilègierai pas cette démarche, certes fondamentale, qui repose sur la collecte et l'inventaire précis d'instruments bibliographiques (fichiers, répertoires ...). Je serai amenée à en parler, mais n'en ferai pas l'objet premier de cette communication. Il m'a semblé en effet plus intéressant de faire le point sur la situation française et de monter l'évolution politique à cet égard, évolution significative depuis une dizaine d'années.

Le droit à l'information du citoyen, qui n'est pas mentionné dans notre constitution, s'inscrit dans une politique de modernisation et de renouveau du service public. Il modifie en effet singulièrement les rapports de l'administration avec ses usagers.

La confidentialité de l'information administrative — sinon le secret administratif — qui était jusque là la règle se trouve bouleversée par une série de *lois* fondamentales mises en place et contrôlées par des *commissions* appropriées, complétées par des *mesures* d'accompagnement.

1. Les lois fondamentales

1.1. La loi du 17 juillet 1978 voit l'émergence d'un droit nouveau: l'accès au document administratif. Elle s'inscrit dans la tradition françaice des libertés publiques et avait été esquissée par l'article 15 de la Déclaration des droits de l'Homme "la société a le droit de demander compte à tout agent public de son administration". Ce nouveau droit était le fruit de sept ans de réflexions, d'études, de travaux, l'idée d'un droit à la communication des documents administratifs apparaissant dès 1971 dans le 2e rapport d'activité de la CCDA (Commission de coordination de la documentation administrative). C'est à l'initiative de parlementaires que sera inséré ce titre 1er intitulé : "De la liberté d'accès aux documents administratifs".

La loi énumère un certains nombre de documents administratifs "tout document détenu par l'administration, *et qui existe*, tous dossiers, rapports, études, compte-rendus, procès-verbaux, statistiques, directives, instructions, circulaires, notes et réponses ministérielles... revêtant la forme d, écrits, d'enregistrements sonores ou visuels, de traitements automatisés, d'informations non nominatives".

Tous les documents administratifs sont communicables "qu'ils émanent des administrations de l'Etat (administration centrale et services extérieurs), des collectivités territoriales, des établissements publics ou des organismes chargés de la gestion du service public", par exemple l'ordre des Avocats, le crédit foncier de France, les caisses primaires d'assurance maladie, les caisses de mutualité sociale agricole, les Fédérations de chasseurs ... Sont exclues de cette obligation les autorités publiques n'exerçant pas de mission administrative telles les Assemblées parlementaires, les juridictions.

Sont exclus du droit d'accès :

— les informations nominatives figurant dans ces fichiers conformément *aux dispositions de la loi n 78-17 du 6 janvier 1978 relative à l'informatique, aux fichiers et aux libertés,* qui peuvent être communiqués aux seules personnes concernées,

— les documents juridictionnels.

Un certain nombre de restrictions peuvent également être apportées à l'exercice de ce droit. L'Administration peut en effet refuser d'accéder à une demande de communication :

— lorsque la communication des documents peut nuire au *bon fonctionnement des pouvoirs publics,* lorsqu'elle touche au délibérations du Gouvernement et des autorités responsables relevant du pouvoir exécutif, (le Conseil des Ministres, les conseils et les comités interministériels, les décisions prises par le Premier ministre et les ministres), pour les documents destonés à nourrir les réflexions des autorités gouvernementales (le rapport Blanchard relatif aux rémunérations annexes en usage dans la fonction publique), pour les documents préparatoires à une décision de l'administration qui ne peuvent être communuquiés qu'une fois la finale prise. Cela vaut en matière d'urbanisme pour les dossiers de demande de permis de construire, ou en matière d'environnement pour les études d'impact sur l'environnement.

— lorsqu'elle porterait atteinte *à l'intérèt général,* cela concerne la défense nationale et la politique extérieure de la France, la monnaile et le crédit public, la sûreté de l'Etat et la sécurité publique.

— lorsqu'elle porterait atteinte aux *intérêts privés légalement protégés* (le secret de la vie privée, des dossiers personnels et médicaux), le secret en matière industrielle et commerciale (secret des procédés, des informations financières, des stratégies commerciales).

— *lorsque la loi l'interdit pour protéger la mission de certains organismes* (Conseil d'Etat et tribunaux administratifs, Cour des Comptes et Chambres régionales des comptes...) ...

La demande de communication s'effectue auprès de l'autorité qui la détient, mais exige un préalable indispensable: que ce document ait été indentifié. C'est pourquoi l'article 8 de la loi prévoit que fassent l'objet d'une publication régulière:

— les directives, instructions, notes et réponses ministérielles,

— la signalisation des documents administratifs.

La demande doit être faite par simple lettre auprès de l'administration qui détient le document. Le demandeur a un droit de réponse s'il constate que le document contient des informations inexactes et incomplètes. Il est ainsi possible de rectifier des erreurs, d'ajouter des précisions et même des pièces au dossier.

L'acceès peut s'effektuer soit :

- par consultation gratuite sur place,
- soit par reproduction de documents aux frais du demandeur "et sans

que ces frais puissent excéder le coût réel des charges de fonctionnement".

En cas de difficulté pour obtenir la communication d'un document, il existe un recours contre un refus de'l Administration, qui est représenté par la CADA. L'article 5 de la loi du 17 juillet 1970 a créé la Commission d'accès aux documents administratifs *qui est chargé de veiller au respect de la liberté d'accès aux documents administratifs* dans les conditions prévues par la loi. Le refus de communication est notifié a l'administré sous forme de décision écrite motivée; il peut également être tacite: "le défaut de réponse vaut décision de refus" ; d'une durée initiale de 2 mois , il a été réduit à 1 mois ó la demande de la CADA. La CADA peut alors être saisie par lettre adressée à son secrétariat, à laquelle est jointe le refus notifié de l'administration et la demande de communication de documents. La CADA statue alors dans un délai de 1 mois sur la demande et émet un avis, qui n'a pas le caractère d'une décision ou d'un jugement. Si l'administration persiste dans son refus, il est possible au demandeur de porter le litige au tribunal administratif par la voie d'un recours pour excès de pouvoir afin d'obtenir l'annulation de la décision de refus.

1.2. La loi n 78-17 du 6 janvier 1978 relative à l'informatique, aux fichiers et aux libertés.

Cette loi est concue comme une barrière protectrice contre d'éventuels abus de l'informatique, notamment quant aux risques que l'automatisation de fichiers nominatifs et leur interconnexion entrainent pour la vie privée. Elle étabit les règles d'utilisation de l'informatique en même temps qu'elle assure la protection de l'individu. Il est clairement affirmé que "l'informatique doit être au service de chaque citoyen".

Seuls sont soumis à la loi les fichiers contenant des informations nominatives relatives à des personnes physiques. Une commission nationale de l'informatique et des libertés, la CNIL, est instituée. "Elle est chargée de veiller au respect des dispositions de la présente loi". Ainsi, avant toute mise en oeuvre de traitements automatisés, il faut lui présenter une demande d'avis ou une déclaration précisant notamment la nature et la durée de conservation des informations collectées, les traitements envisagés et leur finalité. La loi étudie les différentes phases de la chaine documentaire concourant à la mise en place d'un système informatisé.

Elle garantit le droit d'accès et de rectification à toute personne concernée par les informations nominatives. "Le titulaire du droit d'accès peut obtenir communication des informations le concernant. La communication, en langage clair, doit être conforme au contenu des enregistrements". L'article 36 précise également que "le titulaire du droit d'accès peut exiger que soient rectifiées, complétées, clarifiées, mises à jour ou effacées les informations le concernant qui sont inexactes, équivoques, incomplètes ..." L'exercice de ce droit d'accès est facilité par la mise à disposition de la liste des fichiers au public.

La loi protège également le citoyen dans la constitution des fichiers d'informations nominatives car il est dit dans l'article 3 "qu'il est interdit de mettre ou conserver en mémoire informatisée sauf accord exprès de l'intéressé, des données nominatives qui directement ou indirectement font apparaitre les origines raciales ou les opinions politiques, philosophiques ou religieuses ou les appartenances syndicales des personnes".

Il convient de souligner que les dispositions relatives à la collecte, l'enregistrement et la conservation des informations nominatives sont applicables aux *fichiers non automatisés.*

1.3. La loi du 11 juillet 1979 s'inscrit également dans un ensemble d'activités administratives et concourt à améliorer les relations entre l'administration et le public. Elle soumet à *l'obligation de motivation* certaines décisions administratives individuelles défavorables. Son objet est bien de renseigner les individus sur les motifs des décisions défavorables qui leur sont opposées.

Le contenu de la motivation doit être exposé et comporte l'énoncé des considérations de droit et de fait qui constituent le fondement de la décision.

2. La mise en oeuvre de ces droits nouveaux. Bilan

Elle repose principalement sur l'action des deux autorités administratives déjà citées, la CADA et la CNIL, instituées par les lois de janvier et juillet 1978.

— la Commission d'accès aux documents administratifs "est chargée de veiller au respect de la liberté d'accès aux documents administratifs, notamment en émettant des *avis* lorsqu'elle est saisie par une personne qui rencontre des difficultés pour obtenir la communication d'un document administratif, *en conseillant* les autorités compétents sur toute question relative à l'application du présent titre, et *en proposant toutes modifications* utiles des textes législatifs ou réglementaires relatifs à la communication des documents administratifs". Sa composition et son fonctionnement out été fixés par le décret du 6 décembre 1978.

Cette institution indépendante, composée de magistrats, d'élus, de fontionnaires de sensibilités différentes, s'efforce depuis 10 ans d'agir dans deux directions : informer l'usager par reiseignement téléphonique et par un courrier abondant, et persuader l'administration en ayant une véritable action pédagogique à son endroit. Elle a développé ainsi un réseau de correspondants dans les établissements publics avec qui elle entretient des relations régulières, et auprès de qui elle joue également le rôle de conseil.

— Comme la CADA, la CNIL, Commission nationale de l'informatique et des libertés, est une autorité administrative indépendante composée de 17 members nommés pour 5 ans dont cinq seulement par le pouvoir exécutif; elle n'est soumise à aucune tutelle. Il est clairement dit que "la qualité de membre de la commission est incompatible avec celle de membre du Gouvernement". Elle est chargée de veiller aux dispositions de "la loi relative à l'informatique, aux fichiers et aux libertés"... "notamment en informant toutes les personnes concernées de leurs droits et obligations, en contrôlant les applications de l'informatique aux traitements des informations nominatives". Son autorité est par ailleurs nettement affirmée et la CNIL dispose de très larges pouvoirs, car aucun secret ne peut lui être opposé, pas même le secret de la défense nationale. Instance de réflexion, cette commision joue également *une mission de conseil* auprès des administrations et propose comme la CADA des réformes législatives ou réglementaires, étant elle-même dans certains casinvestie d'un *pouvoir propre de réglementation,* car les techniques mises en cause évoluent très radidement. Elle a enfin et surtout un véritable *pouvoir de décision* quand elle donne un avis sur la conservation dans des fichiers manuels ou automatisés d'informations relatives aux opinions, à la race et à la religion.

Ces deux commissions jouent un rôle important de médiation entre l'administration et l'usager, en s'efforcant de trouver des solutions amiables; si elles n'ont pas le pouvoir de contraindre, elles ont toute latitude de rendre publiques des irrégularités dans leurs rapports d'activité.
L'activité de la CADA s'est considérablement développée depuis 10 ans. Le nombre d'affaires traitées a été multiplié par quatre et a été porté à 2098 en 1989 avec une forte proportion de demandes d'avis (1872) par rapport aux demandes de conseil, ce qui semble indiquer une meilleure connaissance par les administrations et par le grand public de la loi. La procédure mise en place n'est pas intangible et des améliorations ont été portées soit à partir de règles jurisprudentielles, soit en abrégeant les durées de procédure : un délai de un mois suffit désormais pour saisir la CADA. Il est particulièrement intéressant d'examiner quels sont les utilisateurs de cette loi: pour prés des trois-quarts, il s'agit de particuliers, dans le cadre d'un conflit avec l'administration, avec toutefois une progression des associations et syndicats (personnes morales de droit public). Il est également intéressant de constater que les demandes de conseil à la Commission émanent d'institutions décentralisées, régionales ou communales (plus de la moitié des conseils) ou déconcentrées (services préfectoraux). Des différences se marquent nettement, Paris et l'Ile de France représented 33% des requêtes.

Les interventions de la CADA portent d'abord dans le domaine de l'environnement et de l'urbanisme (20%), de la fonction publique (18%), ainsi que de la santé et des affaires sociales (11%). L'attitude des administrations s'est certes modifiée et n'est plus seulement défensive vis-à-vis de la transparente administrative. Cette ouverture reste cependant fragile comme en témoigne le nombre important de refus tacites de communication, en particulier de la part des établissements publics. La CADA toutefois a une autorité morale et une influence accrue sur les administrations. comme peut en témoiger leur empressement à communiquer les documents demandés.
Le rôle joué par la CNIL dans sa vigilance à défendre les libertés et la vie privée des personnes est très important, et se traduit par la mise au grand jour de fichiers souvent égarés ou dissimulés. Elle a un rôle non négligeable d'observatoire et d'alerte sur l'évolution des pratiques administratives telle la commercialisation, par des organismes publics, des informations qu'ils détiennent, pour des raisons d'efficacité économique, ou la levée du secret médical pour faire progresser la recherche.
Au total le bilan de l'application de ces lois est positif, ell sont de mieux en mieux connues, grâce notamment à l'action des commissions qui développent une politique d'information active auprès de la presse, des media, pour se faire connaitre du public et de l'ensemble de l'administration.
Dans cette longue route vers la transparence, il ne faut pas oublier le rôle du médiateur institué par la loi du 3 janvier 1973. Autorité indépendante et extérieure à l'administration, il était au départ un simple "intercesseur gracieux entre le citoyen et l'administration". Son rôle s'est affirmé et il est devenu une instance de contrôle pouvant contraindre les administrations à modifier leur pratique. Il est également habilité à proposer des améliorations au fonctionnement administratif. A noter toutefois qu'il n'est pas saisi directement, mais par l'intermédiaire d'un député ou d'un sénateur.

3. Mesures d'accompagnement

Il ne suffit pas en effet d'édicter des lois rendant l'administration plus transparente, encore faut-il qu'elles soient connues.
La mise sur vidéotex du Journal officiel répond à ce besoin d'améliorer et d'élargir la diffusion (code d'accès JOEL sur le 36 15 du Kiosque Télétel). Cependant, la publicité des décisions administratives laisse encore à désirer. Les lois et les décrets sont publiés dans le Journal officiel, certains arrêtés ministériels, les décisions du Conseil constitutionnel, un certain nombre d'arrêtés, de circulaires sont publiés dans les bulletins officiels. Cette publication régulière est prévue dans l'article 9 de la loi du 17 juillet 1978 et été précisée dans le décret du 22 septembre 1979. "Les documents administratifs émanant des administrations centrales de l'Etat sont ... publiés dans des bulletins ayant une périodicité au moins trimestrielle et comportant dans leur titre la mention bulletin officiel". A l'heure actuelle 16 ministères ou secrétariats d'Etat produisent un ou plusieurs bulletins officiels, 29 au total. Il faut noter toutefois qu'un tiers des Bulletins officiels sont publiés sans plan de classement ni table analytique, ce qui ne permet pas de retrouver un texte sur une longue période, car dans ce cas, seul le critère chronologique permet d'accéder aux textes. Compte-tenu de cette situation, un projet de création d'une banque de données interministérielle des textes des bulletins officiels, accessible par voie télématique est à l'étude par la CCDA.
Les documents administratifs qui émanent du département sont publiés au recueil des actes administratifs du départament;
Les documents émanant des autorités municipales sont insérés dans le Bulletin officiel municipal, ou transcrits dans un registre tenu à la mairie à la disposition du public.
Les études et les rapports conduits ou commandés par l'Administration représentent des sources d'information importantes pour le citoyen. Nombre d'entre eux sont recensés dans LOGOS, banque de données produite par la Documentation française, grâce à une collecte pragmatique et active auprès des administrations.
Sous l'impulsion de la CCDA une politique d'édition administrative s'est mise en place dans un

certain nombre de ministères, ainsi qu'un souci plus marqué d'organiser la documentation. La CCDA a également émis des recommandations pour la mise à disposition de guides et de plaquettes d'information à l'intention des usagers élaborés par les administrations ...

Parallèlement, une politique d'information de l'usager a été mise en place en utilisant divers canaux :

— le *téléphone* avec l'implantation des CIRA (Centres interministériels de renseignements administratifs). 9 CIRA fonctionnent en 1991 et répondent par téléphone à des demandes précises d'ordre juridique ou administratif, émanant d'un public très varié. L'ensemble des CIRA constitue un service du Premier ministre et les 7 CIRA existant en 1989 ont répondu ainsi à 1 014 867 appels.

— *la télématique*: la production des guides télématiques, outil essentiel d'une modernisation de l'information du public accompagne le renouveau du service public.

Une circulaire en date du 31 janvier 1990 définit un véritable système d'information interadministrative en matière de droits et démarches, à deux niveaux. Chaque ministère a la responsabilité de définir une politique d'information administrative et produit une banque de données de premier niveau donnant les informations les plus couramment demandées par l'utilisateur. Ainsi, entrant par un point d'accès unique dans ce réseau de banques de données, l'utilisateur pourra interroger niveau, et s'il souhaite avoir des informations plus pointues, sera réorienté par la technique du reroutage vers une base de deuxième niveau.

La CCDA joue un rôle important en veillant à "ce que ce système nouveau et coordonné de production et de diffusion de l'information soit mis en place".

Pour tout projet de création ou de transformation de ces banques de données, la CCDA devra obligatoirement donner un avis. En attendant la réalisation de ce réseau, la Documentation française gère et diffuse le *Guide télématique des droits et démarches VOS DROITS* sur le 3615 du kiosque TELETEL: à partir d'un sommaire de 21 thèmes appartenant à la vie courante (travail, famille, justice, logement, santé...), et grâce à un accès guidé, l'utilisateur trouve les informations administratives utiles dans sa vie quotidienne.

Rendre l'administration plus transparente pour l'usager passe par la connaissance de ses structures, de leur architecture, de leurs domaines de compétence ainsi due des noms de responsables. Une version vidéotex du *Répertoire de l'Administration française*, ADMITEL, a donc été réalisée par la Documentation française. Elle permet la mise à jour régulière de ces informations, et une meilleure exploitation et diffusion. Il est ainsi possible de trouver rapidement le nom du responsable d'un service, les coordonnées d'un service à partir de son intitulé ou de ses principales activités.

Le mouvement qui va vers une plus grande transparence administrative, même s'il est limité et par les textes et par leur application, s'appuie sur d'autres mesures sans doute plus restreintes, allant dans le même sens.

La loi du 3 janvier 1979 sur les archives publiques et privées, a pour objet tout à la fois de redéfinir la notion d'archives publiques et de modificer dans un sens libéral les délais de consultation par le public (délai de droit commun ramené à 30 ans). L'accès aux fiches du casier judiciaire par l'intéressé; plusieurs lois sur l'urbanisme et la protection de la nature prévoyant notamment la consultation d'associations d'usagers, et la mise en oeuvre d'études d'impact; la possibilité pour le contribuable d'utiliser une procédure administrative contradictoire, et de connaitre les données recueillies par l'administration fiscale préparant certaines décisions; le décret du 28 novembre 1983 "concernant les relations entre l'administration et les usagers", constituent autant de progrès dans l'amélioration des rapports entre l'administration et ses usagers.

Le dialogue progresse certes entre l'administration et le citoyen. Il passe par une avancée de la législation, mais cette logique règlementaire ne suffit pas. L'importance des réalisations accomplies en France est réelle et se poursuit avec les travaux de codification pour simplifier la règle et la rendre plus accessible. Ce sont également des comportements qui évoluent avec un besoin de transparence accru dans la vie sociale, des consommateurs de plus en plus exigeants qui demandent une information fiable aux fonctionnaires. Ce mouvement irréversible amène un changement des mentalités qui doivent s'adapter aux impératifs européens.

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Conversion Technology of Multilingual Card Catalogues of Lenin State Library in Machine Readable Form with

A. Vostrikov
Chief, department of automation of libraries,

and

Yu. Fenin
Chief, sector of study and development of international automated library systems,
Lenin state library of the USSR, Moscow, USSR

Introduction

The Lenin State Library (LSL) expands the composition and improves the characteristics of computers and peripheral devices to them. In this connection there is a transition from theoretical works to concrete practical works as regards the conversion of traditional card catalogues into the machine-readable form. In reality this problem is wider — the creation of the retrospective machine readable (electronic) reference aid of the LSL whose component is its system of catalogues and cards. Showing the composition and content of the LSL stocks and of the stocks of other libraries and organs of scientific and technical information, the system of catalogues and cards of the LSL includes about 220 library catalogues and bibliographic card files with tens of millions of catalogue cards which, for instance, can be classified by the method of grouping as alphabetical, classed, subject, chronological, numerical and topographic cards.

The advent of scanners in the LST was determining in practical actions in conversion. They make it possible to feed the picture (image) of catalogue cards into the computer.

The technology of the conversion of catalogues and card files has many versions and is determined, first, by common approaches to it and, secondly, characteristics of used hardware (primarily scanners) and software.

Common Approaches to the Conversion of Catalogues and Card Files of the LSL into the machine readable Form.

The conversion of catalogues and card files of the LSL into the machine-readable form means the feeding of the images of catalogue cards and/or information from them into the system of on-line public access catalogues and card files. During the transition to the system of on-line public access catalogues (OPACs) and cards the principle of succession certainly takes place, and the classification of catalogues and card files is preserved, but some characteristics are reflected on it:

- type of the machine-readable information carrier;
- method of feeding information from catalogue cards;
- language used for feeding information from catalogue cards;
- retrival image of the fed catalogue card.

The presence of these characteristics means that in the course of catalogues and cards it is necessary to take the decision on the choice of their values from the following list:

- type of the machine-readable information carrier;
- magnetic disks, including diskettes;
- videodisks;
- optical disks, including CD-seque ROM (with memory only for reading) and CD WORM (with memory for single record and multiple reading);
- method of feeding information from catalogue cards:
    - keyboard;
    - scanning of the image of the catalogue card;
    - scanning of the image of the catalogue card with the understandinig of the text given on it (This method calls for substantial editing of the text due to still undeveloped software for undestanding images of symbols, primarily written by hand and indification of the text into constituent elements (fields and subfields);

- language for feeding information:
  - language of the original;
  - translation;
  - transliteration;
- retrieval image of the catalogue card:
  - one or several fields (subfields) of information contained on the catalogue card;
  - one or several additional fields (subfields) for information contained on the catalogue card;
  - combination of the former and the latter.

In the course of the scanning of the image of the catalogue card without the understanding of the text the keyboard feeding of its retrieval image is required.

Choosing the initial catalogue (a card file) subject to conversion and fixing additional characteristics, it is necessary to determine the tapy of the OPAC (card file). For instance, having identified during the input the texts of catalogue cards of the General Classed Catalogue of the LSL into all possible constituent fields (subfields), one can form a universal OPAC on magnetic or optical disks (i. e., in this case the type division into classed, alphabetical and other catalogues is removed). The latter enables one in the course of conversion to replace a combination of interconnected catalogues and card files by a single universal OPAC (for example, on account of the type of documents, depending on the stock).

It can be stated that making the decision about the conversion of catalogues and card files into the machine-readable form one should, first of all, determine:

1. The list of catalogues and card files subject to the conversion into the machine-readable (electronic) form.
2. The possibility of replacing (uniting) the combination of conventional catalogues and card files by a single relevant OPAC.
3. The retrieval image of catalogue cards in the OPAC (different solutions are possible for different catalogues).
4 The type of the machine-readable information carrier for the OPAC (card file).
5. The method of feeding information from the catalogue card.

The Problem of Multilinguality in the Conversion of the LSL.

Catalogues and Card Files

The LSL catalogues and card files are multlingual. Technical and programme facilities available on the market, including scanners and systems of the optical identification of symbols OCR (Optical Character Recognition), so far do not allow the inputting or recognition of characters for all languages used by the LSL. There fore, in case of conversion one takes decisions corresponding to real possibilities of hardware and sofrware, as well as conditions of using catalogues and card files. In case of the keyboard input of information from catalogue cards or their retrieval and the output of any character are ensured. The Latin, Cyrillic and New Greek alphabets are the basis of this character. The following notions are inputted:

- the alphabet for inputting information;
- the alphabet for the retrieval and output of information onto the screen;
- the alphabet for feeding information for printing.

In scanning the image of the catalogue card without the recognition of the text the memorizing of information in the language of the original is naturally ensured while the memorizing of the retrieval image of information is ensured in keeping with the rules of the keyboard input.

In using OCR systems the expansion of the composition of characters to be memorized as possible (as compared to the keyboard input).

Technical Characteristics of Scanners

By a scanner we mean a device ensuring the input of two-dimensional black-and-white half-tone or coloured image into the computer (1). Most of scanners are used today for preparing and publishing various information materials. The wide use of scanners in facsimile communication is predicted. Systems of storing and retrieving graphical information can become the field of their use. In these systems materials are stored in the form of images (copies) of entire pages and not in the form of individual lines of text information.

Software which controls the operation of the main types of scanners offers the choice of one of three types of scanning: "the dash drawing", "the half-tone image" and "the grey scale". To explain these terms let us see how the scanner operates.

Like a photo-copying device, the scanner illumines the original while its light sensitive sensor measures the intensity of light reflected by the original with a definite frequency (from tens to hundreds of dots per inch). The resolving power of the scanner is proportional to the frequency of measuring.

In the course of the scanning process the device carries out the conversion of the magnitude of intensity into binary code which is transferred into the memory of the computer for its further processing.

If the scanner records just one bit of information diring each sampling, it recognizes either black or white (black can correspond to the logical unity while to logical zero). Depending on the number of bits corresponding to one sampling the scanner can recognize a greater or smaller number of nuances ranging from black to white. In case of 4-bit coding there is an opportunity to recognize 16 various hues. Eight-bit scanners ensure the recording of 256 levels of grey.

The image containing simplest information and requiring the minimum volume of memory represents a dash drawing which can be processed by one-bit scanning. Such image contains only white or black sections without any intermediate hues. One-bit scanning suits best of all for the reading of images drawn by individual lines.

"Semi-tone images" by means of black and white dots can be considered if we turn to raster printing of a newspaper photograph. If it is enlarged, one can see that it consists of uniformly situated black cells (usually 65 per inch), the size of cells varies. Larger cells produce the impression of black while smaller cells make the image lighter. The half-tone scanning of the image represents the grouping of black dots into such cells. For instance, if the maximum resolution of the scanner is 300 dots per inch and by the horizontal each inch is divided into 75 cells, each cell can contain in width up to 4 black dots.

To obtain results of higner quality the version of "the grey scale" is used where each measuring of reflected light is converted not into zero or unity (white or black), but is recorded by several bits and, thus, the intensity (the level of grey) of reflected light at each dot to be measured is memorized. The human eye cannot differentiate more than 256 hues of grey. Therefore, 8 bits are enough for fixing these hues, but the volume of the required memory of the computer for memorizing the image will increase by 8 times with respect to the dash drawing.

Types of Scanners

To scan objects (catalogue cards, paper sheets, books, etc.) use can be made of plotting board scanners (when the object is placed on the glass which is illumined), scanners with the delivery of sheets, manual scanners (a person draws a line by it on paper), scanners for viewing objects from above (of the type of a photographic enlarger), as well as scanners which replace the printing head and tape on the printer and read the image on paper when the latter is advanced.

Software of Scanners

When the computer gets the image it must preserve this image in order to display, print or carry out any other processing of information read by scanner. If text is a scanning object it can always be memorized in the form of an image. But usually the computer memorizes the text in the form of 8-bit codes symbols (letters, figures, etc.). Most of programme facilities use this method of representing texts. There is the software of the optical recognition of characters (2). It can be oriented directly on a definite type of scanners (then there is no use to memorize the text in the form of images) or delivered separately and process images of the text into codes of characters.

Earlier systems of optical character recognition (OCR) were oriented on the types of typewriters. Today they are oriented on printing-type documents (or those obtained on laser printers) as well where one should recognize the beginning and the end of the character in the image numbered by the scanner due to tne different width of letters (proportional type as distinct from the fixed width of characters of typewriters). OCR programmes must be sufficiently flexible. Users expect from OCR the capacity to read all kinds of types and recognize the text set up in several columns, for instance, newspaper material. The programme should operate rapidly and exactly enough. The required accuracy level must, as a rule, be not less than 98% (the accuracy of the keyboard input of a skilled typist with the good speed of the input). It is clear that these tasks are far from being simple.

There are two types of OCR packages: taught and intellectual. In the first case point-by-point comparison of the numbered character with the sample (mask) in the reference table takes place. It is necessary to have masks for each size of the type. They can be created by teaching the programme each new type.

In the second method various parts of the numeric character are analysed for its identification. For example, the arc in the letter h or the double arc in the letter m. The mask of the character is replaced by its contour which can be used for any size of types. The check-up of the word with the help of the dictionary for specifying the unclear character or other check-ups are possible.

In addition of difficulties of recognizing characters with diacritical marks and especially texts in handwriting OCR makes very hign requirements of the quality of originals to be scanned. In case of substandard images intellectual packages will try to do something, although with poor accuracy, while taught programmes will not function at all.

Technical Characteristics and Software of LSL Scanners.

The LSL has Hewlett-Packard Scan Jet Plus scanners. This is a plotting board scanner of the general function with 8-bit scanning and with resolution of 300 dots per inch. It is worth noting that 256 and 16 levels of the grey scale can be used. Books and sheets up to 8.5 by 11.7 in. are scanned. The scanner is installed with the plate of the parallel interface and the ScanGal software which controls its operation by the HP Vectra computer compatible with the IBM PC/XT/AT under control of the operational system MSDOS 3.0 and higher. The ScanGal carries out preliminary rapid scanning with small resolution and makes it possible to single out the region for the final scanning of the image, controls brightness, contrast and the half-tone image. Before scanning one can scale the image, including various scalings by the horizontal and vertical. The scanning time of a sheet is on the order of tens of seconds. Taking into account the placing of the object on the scanning plane, the preliminary tuning onto each object of scanning and the time of shaping the file of the image to be memorized, it is realistic to count on processing 100-200 objects during 8 hours of working time.

The Choice of the Catalogue and Methods of Its Conversion into the Machine-readable Form

The LSL faces the task of conversion of the system of card catalogues and card files into the form differing from the traditional form — the book form, the microfirm and the machine-readable form. The machine-readable form will call for large calculational resources and considerable labour consumption. The conversion of individual catalogues card files into the machine-readable form can be used for creating their electronic forms, for automating processes of work with them and for preparing various book forms.

The scanning with the recognition of the text could be the most effective method of the conversion of catalogues. Regrettably, as it has already been mentioned above, the potentialities of programme facilities for the recognition of the text so far do not allow one to apply them to catalogue cards, primarily, to those in hand-writing. Nevertheless, the method of inputting information by scanning requires by several times lower labour consumption than the keyboard input. The scanning of the image of the catalogue card and additional graphic information are possible. The image of the catalogue card calls for machine memory which is by several times greater than that which is needed for the text of this card. Before the sufficient development of means of recognizing the text it is reasonable to accumulate images of cards and, if possible, to enrich the catalogue by introducing additional graphic information associated with each card. In any case for using such on-line public access catalogue in the course of retrieving information in it or during preparing its book form the keyboard input of text retrieval information will be needed. Labour consumption for inputting retrieval elements of the data of the catalogue and requirements for machine memory are usually by several times lower that during the input of elements of the data of catalogue cards.

The usual volume of required machine memory for a graphic image makes up 10 Kbytes. Personal computers available in the LSL can store in their memory on magnetic disks several thousands of graphic images each.

The OPAC of Autographs

Amidst catalogues with the volume of up to 5,000 cards we choose the catalogue of autographs available in the LSL Book Museum. Information from cards are fed from the keyboard into the corresponding on-line public access catalogue (OPAC) in the form of the text and are complemented by images of the title (or other) page of the book with the image of the autograph. This information is recorded in the MINIMAX information-retrieval system (IRS) designed at the VNIIPAS all-Union research institute (Moscow) for the prompt retrieval, as well as displaying text and graphic informayion on the screen of the personal computer. The images of cards were not scanned primarily for the sake of saving memory on magnetic disks. In addition, the share of retrieval information both on the author and on the receiver of the autograph makes up a considerable part of catalogue data and labour consumption needed for inputting other data are comparable with the keyboard input of retrieval data. The data on the author and the receiver of the autograph are not duplicated which would take place in case of scanning the image of the catalogue card.

Retrieval Possibilities of the OPAC of Autographs

The OPAC of autographs built on the MINIMAX IRS makes it possible to retrieve documents from criteria used in most of universal IRS: retrival from words with the possibility of masking with the use of logical operations AND, OR, NOT and from contiguity; the use of the already found large number of documents in previous inquiries with the possibility of memorizing and the fulfilment of needed inquieries; the scanning of the inverted file of indexed words with the subsequent retrieval of relevant documents. In shaping retrieval (inverted) files the automatic indexing and coding of words are possible with the removal of endings of Russian words and exclusion of the given list of stop-words from retrieval. The system carries out the format display of found documents (or their fragments) on the screen of the personal computer and into special files of the user, including the printer.

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27-MAN(WS)-1-E

The Application of Life Cycle Costing in Libraries: A Case Study Based on Aquisition and Retention of Library Materials in the British Library

Andy Stephens
Project officer, the British Library, UK

Introduction

The scale of the British Library's commitment to collection management is considerable. Its collections already occupy over 370 miles of shelving, with a growth rate of seven miles per annum. A new library building is under construction at St Pancras in London, but the storage space provided will be full by the end of the 1990's. Meantime, at the Library's other principal site at Boston Spa there is space for growth for only eight years.

Net expenditure on managing the Library's collections (including selection, aquisitions, record creation, storage and preservation) was in the order of #38 million in 1988/89. However, the real value of the Library's grant-in-aid has been declining, while prices of publications have risen faster than the general rate of inflation and the value of the pound ( ) has also reduced the Library's purchasing power for overseas acquisitions.

Funds available for preservation have declined and the Library has switched to more cost-effective methods with greater selectivity to try to relieve the situation. At present, the Library's humanities collections have 1.6 million volumes requiring urgent treatment, and a further 60,000 volumes are being added to this backlog annually.

Meantime, world publishing output has been increasing remorselessly; in the United Kingdom there has been a 50% increase during the last ten years and this is set to rise to 100,000 monograph titles a year by the end of the century. Legal deposit material alone threatens to make ever-increasing demands on the Library's resources.

These factors led the Library to review its acquisitions and retention policies. The decision to undertake a review, arose from consideration of future storage plans, including the fact that available space in the new St Pancras building would be full soon after opening. We were also concerned to have a fresh analysis of the current situation to give us a firm basis for further definition of collection management policies with a view not merely to assessing the constraints on available space, but, more importantly, to helping to maintain the quality of the Library's collections within the limits of available resources for the best benefit of research.

The review (1) identified a need for "up-to-date and relevant figures indicating the financial and spatial implications of the Library's acquisition and retention policies in order to assess properly the likely impact of any policy changes on future accomodation and budget requirements". It was also noted that the Library's acquisition and retention policies tended not to be related, and that there was an actual conflict between maintaining existing holdings and securing new acquisitions. One of the aims of the Review was to highlight the general principle of financial commitment involved in retention of material once it is accepted into the collections. Accordingly, a Life Cycle Costing study was undertaken as a means of both forecasting retention costs and clarifiying the relationship between acquisition and retention policies.

The need for such a tool is not however peculiar to the British Library. Libraries are increasingly interested in reducing costs and allocating resources effectively in the face of competing demands. Moreover, they are required to demonstrate they provide value for money. One major area for scrutiny in recent years has been the cost of library materials and the effects of the increasing prices particularly of serial titles on the library budget. (2,3) However, the acquisition cost can be compared to the visible tip of an iceberg; hidden beneath the surface is a host of underlying costs including the costs of selection, accessioning, cataloguing, preservation and storage. Some of these, such as accessioning or cataloguing are borne by libraries immediately after acquisition; others such as storage costs are relatively insignificant in the short term but are recurrent for the entire period that an item is retained; and while preservation costs may not occur until many years after an item is purchased, they nevertheless represent for research libraries an obligation inherent in the original selection decision making process. It is generally the case that where these costs have been scrutinized, this has been on a fragmented basis and little attention has been paid to the overall spectrum of costs. There is then a need for a technique to support the financial management of libraries that draws attention to, and measures, all the resources expended in selecting and caring for an item during its useful life.

Life Cycle Costing

Life Cycle Costing (LCC) is an accounting concept which "takes account of all the significant net expenditures arising during the ownership of an asset. It is concerned with quantifying options to ascertain the optimum choice of assets and asset configuration. It enables the total life-cycle costs, and the trade-off between cost elements, during the asset life phases to be studied for their optimum selection, use and replacement".(4)

A search of the literature of librarianship failed to reveal a single application of the technique in this field. For construction projects, (5,6) and in the procurement and specification of buildings, (7) it is recognised that the scale of running costs of a building is very much a function of its original design, and the potential for savings in "downstream" costs (such as those obtained for heating following the installation of double-glazing or other heat insulation) will not be visible if the initial cost is the only element to be assessed.

A major and established application has been in the procurement of defence equipment. In the United Kingdom recently, the House of Comons Defence Committee identified an "alarming" shortcoming in Ministry of Defence procurement procedures, and drew attention to the fact that "the cost of supporting modern military equipment usually greatly exceeds its acquisition cost." (8) In the United States, research has indicated that support costs for military equipment can exceed purchase costs by a factor of two or more.

Any technique suggesting that books and other documets should be considered in the same manner as military equipment is unlikely to be embraced readily by the library profession. The applicability of the technique in the libraries will be addressed later, but for now it is clear that there are significant similarities between the cost consequences of asset management in librarires and those elsewhere, and it is this that the life cycle concept both describes and quantifies. Good management and investment in libraries is as vital to the cultural and intellectual well-being of a nation as the management of other assets is to its defence and industrial performance. Librarians need to be equally aware of the costs of caring for an item during its useful life when assessing its potential value for their collections, and need to accept responsibility for the inevitable cost implications of acquisition. In the words of the Sizer Report, (4) "costs incurred at every stage of an asset's life-span are reflection of the past" — a truism that is all too familiar to the world's major research libraries as they grapple with the problems and cost consequences of preservation and storage in particular, which they inherited as a result of the acquisition policies of their predecessors.

The British Library Life Cycle Costing study

Identification of processing pathways and volumes

The first phase of a life cycle costing study is to develop a basic understanding of the collections acquisitions/retention life cycle itself. The life cycle begins with the initial selection decision and extends through acquisitions processing, record creation, preservation, storage and possibly deselection and disposal; although in the case of the British Library with its national archival responsibility, an infinite life expectancy may be assumed for most reference material.

For smaller libraries it may be a relatively straightforward matter to map this life cycle through the organisation structure. The British Library is, however, a large and complex organisation. At the time this study was undertaken, it had three main operating divisions occupying many buildings in London and Yorkshire, and maintained three separately-managed collections; the Document Supply Centre (DSC), the Science Reference and Information Service (SRIS), and the national reference service for the Humanities and Social Sciences (H&SS). In addition, for material acquired under legal deposit, acquisitions processing and MARC record creation was undertaken as a separate operation. In the study, the resulting complex of processing pathways and volumes was identified in a flowchart (Appendix 1) showing the volume of serials and printed books acquired and processed in 1987/88 throughout the Library by department.

Unit costings

The second phase of the study was to identify unit costings for each process in each department. A precondition for detailed modelling is the availability of reliable and sufficiently detailed costing data. There is also need for an effective formula for apportioning administration, accomodation, planning, staff and training overheads in addition to the direct costs allocated to each process in each department.

Towards a Life Cycle Costing model for libraries

Having identified the unit costs of each library process, a simplified equation was developed to describe the relationship between literature acquisition and retention, in order that the life cycle costs might be calculated. The Life Cycle Costing model we developed for establishing the cost (K) of storing and caring for monographs and other single items in libraries over the period $\underline{t}$ years is set out in Table 1.

This equation was refined for serial titles to reflect the differing pattern of publication. The pattern of initial and "downstream" costs is broadly similar to that for monographs, but all components of the equation, with the exception of the initial selection and record creation processes, are also subject to cotinuing expenditure on the intake of subsequent years' issues. (See Table 2).

(Note: t? or termial equals 1 + 2 + 3 ....+ t. This calculation is required in order to reflect the fact that at the end of the period t, the first year's serial parts would have been acquired t years before; the second year's parts would have been acquired t-1 years before, and so on. Thus, at the end of, say, a ten year period, 55 unit years' storage would have been consumed by one serial title.)

Some further explanation of the components of these formulae is provided in Appendix 2.

Results

Examples of the results obtained in the British Library study are provided for both material acquired for document supply from data collected from the Document Supply Centre, and material acquired for reference from the national reference collection for Humanities and Social Sciences. (see Table 3) The example illustrates the relationship between acquisition and retention of library materials and reveal the shape and scale of life cycle costs, which naturally reflect the differing objectives of each service. Archival responsibility is not, for example, assumed for the document supply collection, and catalogue records are created primarily to support stock control activities rather than for reader access, while the reference material is retained permanently, and records are created to facilitate access by readers. For each of the two services, costings are provided for both monographs and serials, and the cost of retaining an item is illustrated for a 25-year period.

A number of general observations can be drawn from these figures. The results illustrate clearly the relationship between acquisition and retention. For material acquired for document supply purposes, the cost of processing and storing a monograph over 25 years amounts to 54% of total costs. For serials, these represent 41% of total costs after the same period. For reference material, the non-literature costs associated with acquiring a monograph amounts to 74% of total costs after 25 years. For serials, these represent 69% over 25 years.

Turning to the shape of the life cycle, it is noteworthy that while record creation forms a significant component of "downstream" expenditure for monographs, this is not the case for serials, where the recurrent acquisitions processing, recurrent initial preservation and reccurent storage costs make the largest single contributions to life cycle costs.

For the selectors there is a major conclusion to be drawn from the results obtained for life cycle costs of serials. These emphasise that the initial decision to purchase and acquire continuously a serial (costing on average 51 pound for the first year's subscription) will, over 25 years, cost 3,100 pound of which 1,200 will be subscription costs in subsequent years and 1,800 pound processing costs. This is the scale of the financial commitment that their library is entering into, and should therefore be taken into account in all decisions on acquisition.

The cost of long-term preservation (p(t) and p(t?)) was omitted from the table of results because of the wide range of preservation options available, and the likelihood that cheaper, alternative methods of treatment might become available in the medium-term. If the original item needs to be kept with hand conservation, and assuming an average life of some 80 years then the depreciated long-term preservation cost of monographs will add a further 15.83 over 25 years. For serials, there will be an additional long-term preservation cost of 205.73 pound over 25 years. (For North American libraries where a 25-year life expectancy has been identified the corresponding additional cost for serials will be 659.75 pound respectively). This clearly increases the significance of the total preservation commitment within the life cycle.

Outcome of the British Library study

The fundamental conclusion of the British Library's Review of Acquisition and Retention Policies was that acquisition and retention activities must be related closely, and the consequences of each on the other in terms of resource consumption more effectively evaluated and monitored. Life Cycle Costing, thr Review affirmed, is "useful for identifying such linkages and securing better understanding of problems and implications both by staff within and by users and funders outside the Library".

The life cycle concept expresses a balance between the resources needed to acquire the full range of materials required to support research, and those needed to fulfil the ever-increasing obligations of maintaining the accumulated collections. Most libraries are able to deal with stock problems by desposing of items which are no longer in demand or have been worn out through use to release pressure. The British Library and other major research libraries are however expected to retain all acquisitions permanently. The Review argued that in assessing priorities and identifying choices, the Library must aim at avoiding what it called "unstable situations", such as backlogs in processing or the "benign neglect" of materials requiring preservation treatment, and in the interests of current and future users, seek to secure balance between resources, activities and user expectations.

In the face of inadequate funding to meet the ever-increasing bill, the Review concluded that "staff skills and experience in selectivity and judgement constitute the key to securing and maintaining continuous review of collections, controlling the relationships between acquisition and retention and ensuring effective exploitation of those collections". This conclusion is analogous to the investment/

savings ratios experienced in undustrial life cycle costing applications, where the reduction of "downstream" costs generally requires an increase in initial costs.

One specific issue highlighted by the life cycle costing study, was the scale of expenditure involved in caring for, and storage of, uncontrolled deposited and donated materials, commonly regarded as "free" acquisitions. The Review oncluded that more staff time should be allocated to controlling legal deposit and other unselected intake and where materials such as duplicate copies had been received under legal deposit they should not be given preservation treatment.

As a result of the Review, the British Library is also seeking closer relationships with the other five United Kingdom Copyright Libraries to work towards a unified national strategy of legal deposit, which could — with agreement of those concerned — lead to a demarcation of responsibility between the Copyright Libraries.

Among other results of the review, the Library intends to rationalise its international exchange agreements, and reorganise its various acquisition processing and cataloguing units into a new centralised Directorate to exploit economies of scale.

General application in libraries

The use of life cycle costing techniques in industrial procurement seeks to quantify the life cycle costs of alternative asset options in order to determine the best alternative. A strictly analogous situation does not exist in libraries where individual titles would not generally be compared and selected against each other on the basis of life cycle cost alone. Nevertheless for serials in particular, libraries tend to single-out titles with high cost subscriptions for particular scrutiny during cost-saving exercises. (14) The life cycle costing technique emphasises however, that within the total costs literature costs diminish in relative importance. It also confirms that the acceptance of so called "free" titlts confers significant associated processing expenditure.

The identification of life cycle costs may also contribute towards establishing the useful working life of an item and its subsequent retention or disposal. If the annual life cycle costs of a title are related to its use and exceed the cost of meeting user needs from an alternative source of supply, measured, for example, in terms of the cost of British Library Document Supply Centre request forms, there is the basis of an economic argument for disposal. Other use-related judgements may be made for long - and short-term preservation treatment, and for storage, where savings from relegation to out-housing may be offset against the cost of retrieval for use.

As a budgetary tool, the life cycle costing technique offers a means of identifying a "natural" or desired balance initial, operational and maintenance expenditure within a library's policy framework and a given level of funding. In all libraries we manage, budget and consider the issues of collection development, record creation, and preservation independently, and have grown to accept both the existence of backlogs in library processing areas caused by the mismatch of resources and responsibilities, and the pressures from parent bodies for constraints on staffing and other areas of expenditure in order to preserve the value of the book budget. "Any move to reduce the number of titles acquired (is) reacted against as an attack on the very nature of the library and its services to research and scholarship. Acquisitions fights for its share of the total budget and one which is most vociferously supported by the library's total clientele". (9) However, the life cycle concept underlines the inevitability that "downstream" costs will be incurred. Be using the technique, the librarian should have an objective and realistic means of achieving a balance in allocating resources to functional activities.

But perhaps the greatest contribution of the technique is to provide an increased degree of cost consciousness and understanding. It will serve to highlight vividly to a library's parent body and users, and to its management and staff, areas in which overall funding fails to meet expectations and commitments. To conclude in the words of the Sizer Report (4) "we are not recommending that every organisation should introduce a complete system of life cycle costing. However, while the extent of implementation of system of life cycle costing is a matter for a organisation to determine for itself, much value can be obtained by thinking in life cycle concepts whenever a decision affecting the design and operation of a physical asset is to be made".

Table 1

$$\underline{K(t) = s + l + a + c + pl + hl + p(t) + ht}$$

Where:

s = the cost of selection
l = the literature cost
a = the accession and acquisition processing cost
c = the record creation cost
pl = the initial preservation cost
hl = the first handling cost
$p(t)$ = the depreciated long-term preservation cost to be incurred during the period t
ht = the storage cost, which is linearly related to t

Table 2

$$\underline{K(T) = s + lt + at + c + plt + hlt + p(t?) + ht?}$$

Where:
s = the cost of selection
lt= the cost of subscription for t years
at = the cost of accession and acquisition processing t years' parts
c = the record creation cost
plt = the cost of initial preservation of t years' parts
hlt = the first handling cost for t years' parts
$p(t?)$ = the total depreciated long-term preservation cost to be incurred by all parts acquired during the period t
$ht?$ = the total storage cost for all of the issues received during the period t

Table 3

Unit costs of acquisition and retaining items for 25 years

Monographs $\underline{s + l + a + c + pl + hl + p(t) + ht = K(t)}$
Document supply 1.87 16.80 5.51 2.07 0.19 10.50 = 36.94 pound
Reference 6.97 16.80 3.50 11.79 2.03 23.50 = 64.59 pound

Serials $\underline{s + lt + at + c + plt + hlt + p(t?)+ht? = K(t)}$
Doc. supply 45.37 1275 226 4.62 221.63 33.25 367.25 = 2173.12 pound
Reference 6.97 1275 610.75 11.79 257.25 354.24 591.50= 3107.50 pound

Notes

1. Value for initial preservation (pl) have been ignored for monographs since few items receive this treatment.
2. Average values for literature costs, shelf widths, and serial parts per title per annum have been assumed.
3. London rents are considerably higher than those of Boston Spa, and London-based staff receive an additional cost of living supplement.

4. The DSC serial title is protected with plastic part-bindings which make it easier to photocopy. The example from the reference collection is buckram bound in annual sets.
5. All costs quoted are at 1987/88 unadjusted cash values. All overheads are included as described above.

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Library Use of Cost Analysis and Cost Recovery

Johanna Goforth
Real Estate Analysis Corporation, Chicago, IL USA,
and
Michael E.D. Koenig
GSLIS Rosary College, River Forest, IL USA

Abstract

Libraries in three countries, the United States, The Netherlands, and Pakistan, were surveyed to determine the extent of their use of cost allocation and cost recovery techniques.

The conclusions were that while the majority of libraries did not use cost allocation schemes, a very large minority did — in the U.S. 40%, in The Netherlands 31%, and in Pakistan 25%. In the U.S., the type of library most likely to use cost allocation was public libraries (52%), followed by special libraries (39%), while in The Netherlands, in was academic libraries (38%), followed by special libraries (30%), while there was an inadequate number of responses from public libraries from which to draw valid conclusions. A substantial number of libraries were contemplating some system of cost allocation, while only two libraries (both in the U.S. and both public libraries), had tried cost allocation and abandoned it.

A much larger proportion of libraries engaged in some degree of cost recovery — in the U.S. 77%, in The Netherlands 43%, and in Pakistan 33%. Academic and public libraries were almost twice as likely — 82% and 72%, respectively, to engage in some sort of cost recovery as were special libraries, 42%, but only among special libraries were there libraries who used cost recovery for more than a small fraction of their expenses. Libraries who used cost allocation and cost recovery schemes were far more likely to find them helpful rather then detrimental to library services. The reasons for using cost recovery were (in descending order of importance):

- budgeting pragmatism
- as a filtering and apportioning mechanism
- the provision of services not otherwise feasible
- institutional pressure to allocate and recover costs.

Cost recovery policies are implemented primarily for the convenience of the library and its staff. The findings imply that the responses of libraries around the world to the pressures impelling cost recovery are likely to be driven primarily by operational pragmatism, and therefore they are likely to be quite similar. How best to respond to the cost recovery imperative is therefore an issue of broad and common interest across librarianship.

Abstract

This article reviews the increasing importance and prevalence of cost allocation and cost recovery in libraries, and provides an entree into the key (English language) literature. It also repots on the results of a study of the use of cost allocation and cost recovery in a stratified sample of libraries in the U.S., The Netherlands, and Pakistan. The review component of the article discusses the emergence of cost recovery in terms of four major developments:

- The increasing quantification of management methods.
- The convergence of the archipelago of information services.
- The shift in the world economic community toward market mecha-

nisms.

- Increased managerial awareness of the importance of information and information technology.

In addition, the article discusses two difficulties attending the introduction of cost allocation and cost recovery schemes in libraries, the general lack of knowledge concerning the economics of information within the library profession, and difficulties created by the traditional set of cultural values of librarianship. Finally, the review section discusses some of the ramifications of the increased emphasis upon cost recovery:

- The issue will not go away.
- We need greater understanding of the economics of libraries and information.
- Librarians must be involved in the design of cost allocation and cost recovery schemes:

  We cannot on those to whom we report to set up cost recovery systems that will not be detrimental to the fuctioning of libraries.

- Librarians must understand:
  - the dictinction between cost allocation and cost recovery;
  - the distinction between and the consequences of various cost recovery techniques;
  - the politics of information.

In the study, a questionnaire was sent to a population of libraries in the U.S., The Netherlands, and Pakistan. The overall conclusions were that while the majority of libraries did not use cost allocation schemes, a very large minority did — in the U.S. 40%, in The Netherlands 31%, and in Pakistan 25%. In the U.S., the type of library most likely to use cost allocation was public libraries (52%), followed by special libraries (39%), while in the Netherlands, it was academic libraries (38%), followed by special libraries (30%); while there was an inadequate number of responses from public libraries from which to draw valid conclusions. A substantial number of libraries were contemplating some system of cost allocation, while only two libraries (both in the U.S. and both public libraries), had tried cost allocation and abandoned it. A much larger proportion of libraries engagend in some degree of cost recovery--in the U.S. 77%, in the Netherlands 43%, and in Pakistan 33%. Academic and public libraries were almost twice as likely, 82% and 72%, respectively, to engage in some sort of cost recovery as were special libraries, 42%. But only among special libraries were there libraries who used cost recovery to recover more than a small fraction of their expenses.

Libraries which used cost allocation and cost recovery schemes were far more likely to find them helpful rather than detrimental to library services. The reasons for using cost recovery were (in descending order of importance):

- budgeting pragmatism;
- as a filtering and apportioning mechanism;
- the provision of services not otherwise feasible;
- institutional pressure to allocate and recover costs.

Cost recovery policies are set primarily for the convenience of the library and its staff. The findings imply that the responses of libraries around the world to the pressures impelling cost recovery, are likely to be driven primarily by operational pragmatism, and therefore they are likely to be rather similar. How best to respond to the cost recovery imperative is therefore an issue of broad and common interest across librarianship.

"LIBRARIES AND THE COST RECOVERY IMPERATIVE"

The Emergence of the Issue

Libraries are increasingly being faced with thee opportunity, the need or the demand, either to allocate costs or to implement some sort of cost recovery mechanism. The is not an easy task to accomplish. It goes somewhat against the grain of the traditional culture of librarianship. Even moree importantly, we, not just librarians but managers and economists as well, know distressingly little about the economics of library service and of information, and therefore the task of structuring and implementing cost recovery schemes is complex and fraught with uncertainty.

The cost recovery imperative is itself the consequence of four major themes:

○ The increasing quntification of management methods.

○ The convergence of the archipelago of informarion services.

○ The shift in the world economic community toward market mechanisms.

○ Increased managerial awareness of the importance of information and information technology.

The Increasing Quantification of Management Methods

A development that needs little documentation here is the increasing quantification of managerial techniques. This itself is in turn the result of two trends. The first is the increasing professionalization of management, the most obvious token of which is graduate proffessional education for administration and management, in particular of course the MBA, the Master's degree in Business Administration. The second trend, quite interestingly, is information technology and its effects, particularly the tools that it is placing at the disposal of the manager. The most obvious tool here is the spreadsheet program and the ability it places in the manager's hands to manipulate data and to explore "what if" scenarios. (A spreadsheet package allows a manager to build relatively easily in tableau representing a situation rather like a conventional paper spreadsheet of expenses, revenues, etc., and then to easily manipulate it, for example, observing what happens if, hence "what if", prices are increasing by 10% and volume drops 5%). To a certain but undeniable extent, capacity and capability fuel demand and managers follow the "boy with a new hammer" syndrome (to the small boy with a new hammer, many things now seem to demand hammering that never called out for it before). Functions and operations, such as libraries, that were treated reasonably satisfactorily simply as an organizational overhead now are asked to provide data about their operation that will allow cost analysis in the fashion that is used for convential production operations.

The Convergence of the Archipelago of Information Services

The phase "convergence of the archipelago" has become standard business shorthand. It derives from a trilogy of three articles by Professor Warren McFarland and his colleagues that appeared in the mid 1980s in the *Harvard Business Review* (See References re: McFarlan & McKenney, McFarlan et al., McKenney & McFarlan). The archipelago reffered to is the archipelago of information services such as data processing, management information systems, telecommunications, word processing, etc. (alarming by its absence in this trilogy of articles is any discussion of the organization's library). McFarland and his coauthors make the point that just as the computer and telecommunication industries have converged, so too are the islands of the archipelago of information services converging, and that for a number of reasons this demands senior management attention.

In this context the most important observation is that the islands in the archipelago are not only converging, they are growing as well. It is hardly original anymore to observe that we are entering an information age and that a larger and larger proportion of workers are engaged in information work rather than in the traditional production of hard goods. The same phenomenon, as McFarland and colleagues observe, is going on within the company--a larger proportion of workers engaged in information work, and a smaller proportion engaged in information work, and a smaller proportion engaged in traditional production work, and as that archipelago of information work becomes larger, it demands more management attention.

Historically, however, much of that information work, including libraries, has been regarded as relatively small scale ancillary functions supportive of the basic production work of the organization. Because they were small, and besause they were perceived as merely support operations, functions such as libraries were generally quite willingly treated simply as general overhead or as general and administrative (G & A) expenses that were not required to allocate or recover their costs. With the recognition of the commonality, the importance, and the growing size of the archipelago of information services, has come a great deal of management attention to that archipelago and its constituent islands (Koenig, 1987).

One of the key questions being asked is: As this archipelago assumes greater importance, should not it and its constituent islands be required to provide the same sort of detailed financial and accounting data that the production operations have been required to provide? The answer to the question, at least as perceived by managers, is implicit in the question, it is 'yes' (Allen). The drive to treat libraries and information services as cost centers or as operations that can recover their costs derives very directly from that question.

The same concern can be presented or analyzed in a slightly different but informative fashion. A basic concept of systems thinking in a business context is that any business organization, or in fact any organization, is a system with inputs (resources consumed) and outputs (products, whether automobiles or educated students), and that for intelligent management decision making to take place, the management must understand the relationship between inputs and outputs, how much resources are consumed for what products? Without such an understanding, one does not truly understand the costs of production of the products nor does one have the basis for the appropriate setting of prices, nor an understanding of what products are subsidizing other products nor to what degree. (Note, as the world economy is becoming more market driven, this concern becomes more salient [2]Malone[3]). A small scale support operation may by treated as overhead, without too great a degradation of that understanding of the relationship between inputs and outputs. And, if the support service handles information, a good about whose economics we know cooperatively easiest way to handle things. As the archipelago and its islands grow, as they become a significant proportion of the organization's overall operations, that approach is no longer acceptable. The only way to even maintain, much less improve, the understanding of the relationship between inputs and outputs, is to require that those islands record, study, and analyze their operation and their costs so that their costs (their inputs) can be related to their services (their outputs) and these in turn can be the costs (the inputs) to the functions supported by the library, including the production operations of the organization.

From this logic derives the need for cost allocation of library services. Cost allocation is not the same as cost recovery, but it is the basis of cost recovery. One can allocate costs and have knowledge of what library supports without necessarily recovering costs. For example, one can analyze and allocate how much of the libraries' costs go to support marketing, how much to production, etc., without necessarily directly changing those departments. If one has the data for allocation, one also has the data necessary to implement a cost recovery scheme.

The Shift in the World Economic Community Toward Market Mechanisms

Allued to above is the shift along the spectrum of economic operations from the central planning end of the spectrum to the market end. The phenomenon is, of course, much more complex than can be captured on a simple one dimensional spectrum, but that image of the spectrum serves to highlight and encapsulate the trend. Included are not only the economic and governmental changes in Eastern Europe and elsewhere, but also changes within industry and privatization of telecommunications and other industries (Beesley).

One fascinating thesis is that those developments are to a significant degree the consequence of improved information technology. Simplified somewhat, this thesis states that central planning and direction is appropriate in a communications and information-sparse environment, the best example being military operations typically conducted in what von Klauswitz described as the "fog of war", but that the more information that can be put in the hands of more managers in a more timely fashion, the more appropriate market mechanisms become as an economic decision making mechanism (Malone; Koenig, 1990 A). As information technology improves, in is arqued that market mechanisms become compfratively more efficient and effective.

Market mechanisms, however, demand more information. This in turn leads to the demand for more cost analysis and cost allocation of here-to-fore relatively unexamined institutions and functions such as libraries. The reasons are essentially the same as discussed under the 'archipelago of information services'.

There is consequently simply an unavoidable emphasis upon cost justification in market mechanism economics. This does not mean that societal goods or intangibles are not eminently defensible justifications. It does mean that cost analysis and cost justification are more taken for granted, cost related questions are more readily asked, and answers, particularly where data is available or potentially available, are more routinely expected.

Increased Managerial Awareness of the Importance of Information and Information Technology

A final and very important theme is simply the increased managerial awareness of the importance of information and information technology. In the 1980s the proportion of articles in the general management journals devoted to issues of information and information technology increased dramatically. As pointed out by Broadbent and Koenig in their presentation at IFLA in 1988 and in a subsequent article in the IFLA journal (Broadbent & Koenig, 1989) the number of such articles in the two bellweather journals of management, the *Harvard Business Review* and the *Sloan Management Review* jumped five-fold in only five years in the 1980s. This topic has been the subject of an extensive chapter in ARIST, *Annual Review of Information Science and Technology* (Broadbent & Koenig, 1988).

Here we will recapitulate only a few of the central topics in this theme and refer the interested reader to the items above. The most compelling topic from a business point of view is that of utilizing information and information technology to gain competitative advantage, principally by setting up some service or by setting up some more efficient link between customers and vendor or between producer and supplier that produces a competative advantage (Parsons; Porter, 1985, 1987, 1990; Rockart; McFarlan).

Another compelling topic, or more accurately, cluster of topics, is the use of information in planning. Sub-topics here include the emergence of executive information systems, the awareness of the importance of external (non organizationally generated) information to strategic decisions, and the central, indeed overarching, role of analyzing information and information flow in systems design ('structured design methodology' including data flow analysis') [Gane & Sarson, 1979; DeMarco, 1979]. The most compelling token of this concern is IBM's articulation of 'enterprise information analysis' in which IBM joined their business systems planning methodology to Rockart's notion of critical success factors (Parker). Stated at the highest level, the doctrine of enterprise information analysis states that to run and plan for an organization successfully, one must:

1) decide what your *enterprise* consists of (what is your business, what are you trying to accomplish, what are the goals and objectives),

2) decide what *decisions* have to be made correctly to be successful in that enterprise,

3) decide what *information* is needed to make those decisions correctly.

This formulation eloquently and compellingly focuses management attention upon the importance of having the right information.

There have also been a number of stage hypotheses purporting to be useful in planning and predicting, that relate spacifically to information and information technology and its effect upon organizations (Nolan; Rockart & Scott-Morton; Koenig, 1987; Marchang; Gibson & Jackson).

The archipelago effect discussed separately above, also falls in the category of topics that have generated management attention. The management of the converging archipelago is a topic that demands top management attention if only for the reason that typically the lines of authority for those islands, the library reporting to the vice president for R&D, data processing reporting to comptroller, etc,. are joined only at the top, and therefore only top management can accomplish the integration of the archipelago.

Another rapidly emerging topic is the relationship between information provision and the productivity of information workers (Koenig, 1990A).

Yet another topic is the effect upon orrganizational and industry structure of information technology. Much of the structure of the traditional organization is based, often without conscious awareness, upon the limitations of providing the appropriate information in a paper-based environment. As information becomes more easily communicated electronically, those constraints are removed, often with dramatic effect upon ways of structuring organizations and doing business. This can effect not only the organization itself, but also the whole infrastructure of business and industry, indeed the very existence of companies. Direct communication between manufacturer and parts supplier (referred to in business as EDI, electronic data interchange) may remove the need for traditional middle man functions and organizations such as jobbers or wholesalers. Needless to say, those sorts of potential impacts grab top management's attention (Hopper).

Indeed, what many of those topics have in common is that they demand not just management attention, but management attention at very senior levels. The result is that information services, including libraries, are receiving an unprecedented degree of management attention, much of it focusing upon the economics of their activities. This increased attention may not always be welcome, but it is certainly better than the opposite, no attention. However, it is of course very important that we be prepared to respond to that attention.

Backgound Issues and Difficulties

The implementation of a cost recovery scheme for a library, even in a corporate library in a for-profit environment, is not an easy task.

Lack of Knowledge of the Economics of Information

One major reason is the fact that we have surprisingly little understanding of the economic behavior of information and information services such as libraries. The question of how best to go about setting up cost recovery mechanisms for a service or commodity about whose economic behavior we are very uncertain is a complex and troubling one. A cost recovery system is an accounting system, and we are therefore faced with what appears to be the proposition of setting up an accounting system for a function that handles an item, information, for wich we do not know how to account. The prospect is not an inspiring one. We will return to this theme below.

Potential Clash of Professional Cultures

A second and very much interrelated reason has to do with the culture of librarianship and an intrinsic reluctance to charge for services rendered, or in general to place any obstacle in the way of greater use of libraries. The culture of librarianship derives primarily from the free public library movement and the concommitant view of the library as the peoples' university and of librarianship as a service profession. Accompanying that is the tradition of the academic library and the tradition of service to scholars and scholarship, embedded as it is whithin the culture of sholarship which sees itself as egalitarian and universalist. It is interesting to note that the greatest reported urgency of the cost recovery imperative is in the corporate libraries' area, an area which particularly in English speaking countries, has been somewhat separated from the main-stream of librarianship (in both the U.S. and U.K., corporate libraries felt the need to set up their own professional associations, SLA & ASLIB, partially because of what was perceived to be the lack of adherence to the cultural norms of librarianship on the part of corporate librarians). [Note: This is not so much the case in other countries. In German library education, for example, there is one curriculum for academic and corporate librarianship and another for public librarianship.] Although the cost recovery imperative is most compelling in the case of corporate libraries, it is by no means limited to that area. The issue is one that affects all of librarianship, and the experience and knowledge gained in one sector can be profitably put to use in other sectors.

It should be made quite clear at this point that the reluctance to recover costs or charge for services is by no means merely a blind adherence to tradition or a set of cultural norms, nor is it a reactionary luddite-like response. There are good reasons, often not articulated as clearly as they might be, why the library community has an intuitive skepticism toward the topic of cost recovery and charging for services. This returns us to the theme of how little we know concerning the economic behavior of information and libraries. Information goods and services do not behave like conventional goods and services. First, information goods are characterized by (in publishing terminology) very high first copy costs and very low additional copy costs, or (in conventional economic terminology) very high fixed costs and very low incremental or marginal costs. Second, information is not depleted by use, and particularly in electronic form, can provide substantial simultaneity of use. The consequence of this is that the cost of establishing information products and services, including libraries, tends to be very high, while the incremental cost of use tends to be very low. Given therefore the high cost of establishing an information service and the low cost of any particular incident of use, coupled with the fact that use is apt to have social benefit, a very strong case can be made that charging for use is typically counter-productive, that more benefit can be lost by use foregone than is achieved by charging. This argument that charging for use is likely to be counter-productive is a key component of the traditional culture of librarianship.

The argument that charging for use is computer-productive, however, makes two key assumptions. The first is that it is the consumer or direct user who is charged, and the second is that the charging mechanism is on a per transaction basis, or at least at a level of detail or granularity that is close to a per transaction basis. Cost recovery, it must be immediately pointed out, does not necessarily imply either of those conditions. Cost recovery can, of course, be borne by the direct user on a per transaction basis, but cost recovery can be structured in various other fashions as well.

The implementation of a cost recovery scheme is then to be approached very carefully in a very deliberate fashion. First, there is a high degree of uncertainty, and it is not at all clear how best to go about it, and second, there is the significant problem of introducing a very major change in operational approach to a professional culture that may well see the change as alien and unwelcome.

Ramifications

The Issue Won't Go Away

The concern about costing, cost allocation, and cost recovery is long term, not temporary. Of the four key factors converging and focusing attention upon cost recovery, none appears to be transitory. Management style is not likely to become less quantitative. Information technology will continue to provide better hammers. As we move increasingly toward an information society, the islands in the archipelago will only get larger. If the shift toward market economies is at base a phenomenon driven at least in large part by the increased capability of information technology, that capability will, according to virtually all experts, continue to grow dramatically, and consequently the shift will continue. Similarly, as information technology capability grows, so will its impact, and so will management attention ti it. The subtle irony is that is the increase in capacity of our own information technology which all of these trends have in common, and by wich to a large degree they are driven. It is ultimately our own information technology which is producing the thrust toward cost allocation and cost recovery for libraries and information services, and it will not go away, nor should we wish it to.

The Need for More Knowledge of the Economics of Libraries and Information

As noted previously, a major problem in implementing a cost allocation or cost recovery system for a library is that in general we know very little about the economics of infomation and information services such as libraries. This lack of knowledge is both general and very specific to librarians. The economic community knows distressingly little about the economics of information and is quite frank about admitting it. Librarians not only have the same lack of knowledge, they also frequently have a genuine disinclination to learn about it. The self selection process by which people become librarians frequently includes an interest in service and not infrequently a disinterest in business and its concommitant bookkeeping and cost accounting.

An obvious ramification is that the library community must bring itself up to speed in its knowledge of the economics of information and information services and in the basics of cost accounting and cost allocation it if is to function optimally. Librarians will need to talk and negotiate with their managers in a convincing fashion. The most pressing reason is that given the general lack of knowledge in the economic and business community about the topic *we cannot count on those to whom we report to set up cost recovery systems that will not be detrimental to the functioning of libraries.* This point is extremely important and cannot be emphasized too much. If effective and non-damaging cost recovery systems are to be set up, librarians will need to be involved in the design and construction of those systems. To be effectively involved, librarians must be knowledgeable.

A corollary of the above is that librarians must not wait until management proposes to extend an existing cost allocation scheme into a cost recovery scheme. By then an attempt at involvement may be too late. It is important to be involved in any cost analysis or in the development of any cost allocation scheme that involves the library. The reason for this is that, if a cost recovery scheme is to be implemented, when either a recent cost analysis exists or a cost allocation process is in use, it will almost certainly be seized upon as the basis of that cost recovery scheme.

The next obvious ramification is that the library community should, insofar as practical, take the lead in studying the economic aspects of libraries, including in particular techniques of cost analysis, cost allocation, and cost recovery and the effects of the latter upon library utilization and library performance.

The Distinction Between Cost Allocation and Cost Recovery

A basic understanding that librarians must have is that between cost allocation and cost recovery. The definitions used in the questionnaire disseminated in conjunction with this study are instructive:

> Cost Allocation is the process of identifying what proportion of the costs incurred in running a library are appropriately attributable to the specific users or units served or to the outputs provided by the library. Also referred to as cost apportionment or cost attribution. Cost allocation is useful for managerial decision making, whether or not any cost recovery mechanism is implemented or contemplated.

> Cost Recovery is the process of transferring the costs of running a library to the users or units served, through either direct charges or through budget allocations, thereby "recovering" in full or in part the costs of necessarily, cost recovery is based on a cost analysis study and a cost allocation scheme.

Frequently there is resistance to cost allocation on the part of librarians because it is the typical precursor to cost recovery, a process about which they are skeptical and believe is quite likely to be detrimental both the library and to the community which it serves. This concern is understandable but can be very counter-productive. First, if the organization decides to implement a cost recovery scheme, that scheme is more likely to be a well-advised one if the organization has had a well-thought-out cost allocation scheme and if the librarians have been instrumental in constructing that scheme. Secondly, a cost allocation scheme can be politically and tactically advantageous to the library, and does not have to lead to cost recovery. Thirdly, a cost recovery scheme can be initiated without a prior cost allocation scheme, either simultaneously with a cost allocation scheme, or even without one. In either of these cases, particularly the latter, the cost recovery scheme is likely not to be well thought out and not conducive to good library service.

The Distinctions within Cost Recovery

Cost recovery can be accomplished in various fashions. The most obvious fashion is that of charging for service on some sort of per transaction basis. This is the easiest method to comprehend and explain, but it does have serious drawbacks. It can have a chilling effect on use. In an organizational context, users may not have sufficient money in their budget, or may need to get various bureaucratic approvals. Although the research to date has been skimpy, principally because the area is very difficult to quantify and to research, what research has been done indicates that industry in general very much underinvests in libraries and information services (and most of the research reported upon has been conducted in the U.S. which is not known for meager library support) [Koenig, 1990A]. If that is the case, any pricing scheme that tends to discourage use is clearly likely to be counter productive. In public and academic libraries, the same argument can be made, but with somewhat less certainty, since comparable studies have not been made, owing principally to the greater difficulty of conducting such studies in those more complex environments.

Cost recovery can also be accomplished at a higher level, typically the level of the department served. In this fashion, typical of industry, careful statistics are kept and costs are analyzed by department served or output supported. At budget preparation time (typically done on a yearly basis) different units served by the library agree to pick up an appropriate portion of the libraries' cost. In some cases, the costs are assigned to the units by a central administration based on an analysis of the appropriate statistics. In other cases, a parent unit, perhaps R&D, assumes the bulk of the expenses (the library having to prepare and defend its budget within that department), while services to and for other units, perhaps marketing, are negotiated, based on documented past use and expected future use. The advantage of such a scheme is that it recovers costs and assigns the costs to the units served by the library in a fashion that meets the dictates of good cost accounting, yet it avoids the problems inherent in charging on a per transaction basis. Numerous variations are of course possible. One is that routine transactions are not charged for, and are covered by a negotiated budget,while non-routine, i.e. unusually expensive services, for example a major research study, are negotiated with and then charged to the requesting department. If the volume of operations, and in particular the proportion of transactions across departments, is substantially different from that on which the budget negotiations were based, budget renegotiations and modification procedures are quite possible.

The salient point to remember is — *cost recovery can be structured in numerous ways, some of which entirely avoid those problems of charging for service which librarians are legitimately concerned about.*

Understanding the Politics of Information

Finally, librarians must understand the politics of information whithin their organizational context. Cost accounting, cost allocation, and cost recovery are all political arts. The methods by which one allocates cost are politically selected. There are no ISO standards by which one selects how to allocate costs (whether by department served, or by product produced, for example); that is entirely a political decision. Costs can be allocated in numerous creative ways. Witness only the disputes about what constitutes 'dumping' for example. Much of this flexibility is inherent in the nature of costing; full costing is appropriate in some instances, marginal costing in other situations, not to mention the hybrids between the two (Koenig, 1990). There is not sufficient scope in this piece to address the complexities of costing. Suffice it to say that librarians need to familiarize themselves with the basic comcepts and techniques of costing, cost analysis, and cost allocation. Equaly important, they must become comfortable with the politics of the costing process. Costing and cost allocation is a way of keeping score. Costing and cost allocation is a political game. Librarians must learn to play that game well.

THE STUDY

Introductory Comments

The intent of the study was to ascertain roughly what proportion of libraries now use some sort of either a cost allocation or a cost recovery scheme. The U.S., The Netherlands, and Pakistan were chosen, so that there would be data on one North American, one European, and one Third World country. The particular countries were chosen based on the contacts and language skills of the investigators. A stratified sampling technique was used so that there would be a population of special, academic, and public libraries from each country. The questionnaire is presented, in reduced size, as Appendix A.

The response rate is general was good, with an overall 47% response rate. Fourthermore, the degree to which respondents were willing to add extensive explanatory comments was truly heartening. Fully a quarter of the responses contained extensive and very helpful comments. For some reason, while the response rate from special and academic libraries in The Netherlands was good, the response rate from public libraries was not. Thus, while there is enough date to make comments about libraries in the Netherlands in general, we cannot say much about public libraries there. From Pakistan, the overall response rate was much less. Given recent political turmoil, this is not surprising. The investigators had great difficulty communicating even with their Pakistan correspondent. There is enough data to make general observations about Pakistan, but not enough to make comments about type of library with any degree of confidence.

Findings:

Cost Allocations

The majority of libraries do not use cost allocations, but a very substantive minority do report using some variety of cost allocation procedure — in the U.S. 40%, THe Netherlands 31%, and Pakistan 25%. Furthermore, these are conservative interpretations, since a substantial percentage of the respondents did not answer this question (12.5%), and the most conservative interpretation is that those respondents are more likely to be non-users than users. (Their lack of response may be a consequence of not being fully comfortable with the question, which discomfort in turn is likely to be linked with non-use of allocation procedures). However, it is likely that at least some of the non-respondents do use some form of allocation scheme, so the numbers above, which are based on all questionnaires returned, are likely to be lower bounds, that is, estimates on the low side.

In implementing allocations schemes, special libraries used both the procedure of making allocation at the time the service was performed, and that of making periodic allocations based on statistics maintained, and both techniques are used with similar frequency. There is a slight preference for time of service allocation, but this is not statistically significant. Academic and public libraries, however, exhibit a strong tendency (80% versus 20%) to use periodic calculations in preference to time of service allocation.

In terms of to whom the allocations were made, special libraries tended (88% versus 12%) to make their allocation to operating units or departments (for example, the marketing departments) rather than to product lines. Public libraries responded quite similarly, typically allocating costs to groups served, youth, elderly, business users, etc., rather than by type of service. The latter is, of course, not surprising, there being no real functional equivalent of product lines (though one public library did in fact report allocations by product line). Academic libraries have a slight preference for allocation to unit (for example, chemistry department), but almost equally often made allocation by product line (for example, undergraduate versus graduate versus continuing education, or course support versus research support).

For both timing and the target of allocation schemes, there was no statistically significant difference by country in comparing the U.S. and The Netherlands.

While only two libraries, both public libraries in the U.S., had abandoned a cost allocation scheme, a number were contemplaing it (8 of 120 responses or 7%). Fifteen libraries reported not contemplating it, while the balance, the majority, did not answer the question, which can probably be typically interpreted as the matter is not under discussion at present, at least not within the library. One intriguing phenomenon is that 3 of the 13 responses from academic libraries in The Netherlands reported that they are contemplating cost allocation (5 report already doing so), an unusually high percentage, and statistically significant at the .05 level.

Cost recovery

The majority of libraries in the study, 56% of the respondents, (63% of those who responded to this question) engaged in some version of cost recovery — in the U.S. 77&, The Netherlands 43%, and Pakistan 33%. The latter statistics, and the balance in this section ARE based on the number of respondents, 106, who responded to the question about cost recovery. Interestingly, academic (82%) and public libraries (72%) were almost twice as likely to use some sort of cost recovery scheme as were special libraries (42%). This is an intriguing finding, given the perception of special libraries, at least those in corporate settings, as existing in a more financially sophisticated and more cost recovery oriented environment. One possible explanation is that in such an environment most users are members of the same parent organization, and thus, whether the service cost comes from the library budget or the users' budget, it is ultimately the same organization's budget. For must public and academic libraries, however, that is not true, and the budgeting pragmatism of having the user shoulder some costs is perhaps more compelling.

Our findings in regard to special libraries is consistent with the results of a study undertaken by the Information Advisory Committee of the Conference Board in New York City, but never published (Information Advisory Council... 1988). This survery queried the cost recovery procedures of the libraries of the top 100 industrial corporations in the U.S. Among the libraries of those very large corporations, they found that 4% were using cost allocation and cost recovery procedures extensively and operating as profit centers, and a further 61% were using cost recovery procedures for some services, but not functioning as full profit centers. These percentages (a total of 65%) are somewhat, but not dramatically, higher than the percentages in our sample (42%). Taken together the two studies indicate that, as one would surmise, the larger the corporation, the more likely the library is to use cost allocation and cost recovery techniques, and to use them more extensively.

Also striking was that all 20 of the academic libraries in the U.S. reported some sort of cost recovery, as opposed to a bare majority in The Netherlands, 6 to 5. Similarly, special libraries in the U.S. were twice as likely, at 62%, to use some sort of cost recovery system than were those in The Netherlands, at 31%.

In regard to the method of cost recovery used, by far th most frequent method cited is a flat fee for a particular service, with a variable or a variable plus a flat fee nearly as common. Somewhat surprisingly, academic libraries were more likely than special libraries to use variable fees. This seems to be a direct consequence to pass on the cost of online database searching to the user. Public libraries used flat fees most often by far.

For online searching, academic libraries were most likely to charge for online searching, 26 of 41 respondents reported that they so charged; not one reported that they did not charge. There were, however, 15 non responses. The most typical charging basis was direct cost (the bill received from the vendor) only. Roughly a quarter of the institutions added some sort of overhead charge to the direct cost. Another quarter added such charges, but only for external (not affiliated with the university) users. A few institutions had what might be called a co-payment scheme whereby the user pays something, to discourage frivolous use, but not the entire direct cost. Of course charging only the vendor costs has functionally the same effect. Public libraries and special libraries were much more likely to not charge, 5 of the 18 public libraries who responded to this question and 5 of the 17 special libraries reported not charging. Again, reimbursement for direct out of pocket costs was the predominant charging scheme.

For manual reference searches, charging was uncommon but not unknown for all three types of libraries. Ovelall, of the 61 libraries who responded specifically to this question, 11 (18%) answered that they did charge.

The difference is proportion, 63% versus 18%, for two processes that produce the same result, a literature search, is striking. It tends to confirm the same result, a literature search, is striking. It tends to confirm the often made observation that the most important factor in determining cost recovery and fee for service procedures in libraries is budgeting pragmatism, not the service philosophy or goals of the institutions.

For both document delivery services and inter library lending costs, the results were relatively consistent across type of library.

TABLE 1

Percentage of Libraries Responding Who Recover Costs for:

	Special	Academic	Public
Document Delivery	71%	72%	44%
Inter Library Lending	50%	73%	55%

Public libraries are in general less likely to charge for those services than either special or academic libraries, and special libraries are much less likely to charge for inter library lending than they are for document delivery. The one interesting observable difference by country is that U.S. academic libraries are much less likely than academic libraries in The Netherlands to charge for such service, 61% and 68% respectively versus 86% and 100%. Again, there was not enough data to make a comparison with libraries in Pakistan.

For either preparing bibliographies or for providing consulting services, the overall ratio was three libraries not charging for the service for every library who did charge. The one dramatic difference was in the proportion of The Netherlands versus U.S. academic libraries who reported charging. In The Netherlands, 60% of the academic libraries who responded reported charging for preparing bibliographies, while in the U.S., only 6% of the academic libraries reported charging for such services. For providing consulting services, the percentages are 50% and 21%, respectively.

For translation services, 53% of the special libraries chrged, 20% of the academic libraries, and none of the public libraries reported charging. There were no statistically significant differences by country. In retrospect, after analyzing respondents' comments, the investigators believe that this was an ambiguous question. The question did not make clear whether what was meant was assistance in locating a translation, or the comissioning of or the actual creation of a translation (the investigators had the latter in mind). For this reason, limited confidence should be placed in the results reported above.

For photocopy services, those libraries who responded to this question reported overwhelmingly that they charged for photocopies. The only exceptions were three special libraries in the U.S. (of 13 respondents) who reported not charging, and one public library in Pakistan. No academic libraries reported not charging for photocopies. In almost all cases, the charging method was a set fee per page, with the fee ranging between $.05 and $.20 (U.S.$). In a few cases there were different rate structures, such as one rate for self service versus another for staff supplied, or one rate for those affiliated with the institution, and another for those not, etc.

Concerning cost recovery for services provided to users outside the basic service population (the municipality, the university, the corporation, etc.), this procedure was quite common. Ovelall, 58% of the respondents who answered this question did so affirmatively.

TABLE 2

NUMBER OF LIBRARIES CHARGING FOR SERVICES TO EXTERNAL USERS

	Special Libraries	Academic Libraries	Public Libraries
Do Charge	8 (3) [2]	23 (17) [14]	7 (1) [7]
Do Not Charge	11	5	12

(The number in parentheses is the number of respondents who report using a different charging scheme for external users. The number in brackerts is those reporting using a subcription fee for at least some services.)

Academic libraries are clearly much more likely than either special or public libraries to have such a charging system. Academic libraries are also much more likely to use a different rate for external users than they do for internal users (number of respondents in parentheses). It is also very common in both academic and public libraries to have some sort of subscription arrangement as a basis for providing services to external users. In fact, all the public libraries who reported some sort of cost recovery for services to external users also reported that some sort of subscription arrangement was in place, as did 61% of the generally apply only to some services. Thus, while seven out of seven public libraries who reported charging external users also reported some sort of subscription arrangement, only some of the services they supplied and charged external users for were handled in this way. Differences by country in these practices were not statistically significantly different.

Satisfaction

Librarians who used cost allocations and cost recovery schemes were far more likely to find them helpful rather than detrimental to library service:

Libraries who found the use of cost allocation or cost recovery

to be helpful to library service: 35
to be neutral to library service: 12
to be detrimental to library service: 4

Furthermore, the "helpful" responses were more heavily positive than the "detrimental" responses were negative. On a scale of 5 to 1 (see question #8 in the appendix), the average score of the "helpful" responses was 4, while the average score of the "detrimental" responses was 3.5. Nine of the 35 'helpful' responses, roughly one quarter, picked a score of five, "very helpful", while none of the 'detrimental' responses picked a score of 5, "very detrimental".

Type of Budget

Libraries overwhelmingly use simple line-item budgets. Relatively few libraries, only 18 instances, used the more sophisticated program budget either alone or in combination with a line item budget. The most likely user of a program budget were the public libraries, 33%, then academic libraries, 14%, and finally special libraries, 4%. The paucity of special libraries using a program budget was surprising to the investigators.

The investigators were hoping to ascertain whether there was any correlation between type of budgeting process used and the method (or not) of cost allocation and cost recovery used. However, the respondents overwhelmingly reported using a straightforward line item budget, and the use of more sophisticated budgeting systems, in particular a program budget or ZBB, Zero-Base Budgeting, a variant of a program budget, was so scarce (18 instances) that only limited comparison can be made.

The differences between those libraries who use a program budgeting technique in comparison to libraries who do not are however illuminating.

TABLE 3

	Libraries Using a Program Budgeting Scheme	Other Libraries
Use Cost Allocation	61%	38%
Use Cost Recovery	78%	60%
Charge Third Parties	63%	57%

Libraries who use program budgeting are significantly more likely to use cost allocations schemes and to use cost recovery schemes than are other libraries. That there is a high correlation between program budgeting and cost allocation is not surprising. What is surprising is that 39% of the libraries who report using a program budget (either alone or in combination with a line item budget), do not report using cost allocation. In principle, program budgeting is based on cost allocation, and one cannot have the one withhout the other. In practice, what seems to be the case is that the libraries using a program budget but not reporting use of cost allocation appear to be interpreting cost allocation as collecting and analyzing usage and cost statistics substantially beyond what is conventional in of libraries reported above to be using cost allocation is in fact too low, that some libraries using cost allocation procedures are not reporting it as such.

Somewhat interesting is that there is a significantly larger proportion of program budget libraries practicing some degree of cost recovery, but not a significantly larger proportion charging third party users. This may imply that greater financial awareness leads to both greater use of program budgeting and of cost recovery for internal users (those affiliated with the institution), but that the decision to charge external users is primarily political in nature.

Program budget libraries were also more positive about cost allocations and cost recovery techniques. None of them viewed their use as 'detrimental' to library service, and only two responses were neutral. One could speculate endlessly about this correlation, but probably the simplest explanation is again that there is some sort of circularity between financial sophistication, the use of program budgeting, and acceptance of cost allocation and cost recovery as legitimate library management techniques.

Non Users of Cost Recovery

Among those libraries not employing any method of cost recovery 39 of 106 respondents (37%), most, 34 (87%) reported that the library's costs were simply treated as part of the parent organizations' overhead expenses. Three libraries (8%) were actively considering initiating a cost recovery system; one library reported having considered such a development but not implementing it, and one library reported having used a cost recovery system and abandoned it. Fifteen libraries responded affirmatively to the prompt that "We do not have a cost recovery system and do not plan to use a cost recovery system for library expenses in the foreseeable future". That of course implies that twenty-four (62%) of the libraries not now using some sort of cost recovery program did not so reply. These responses certainly imply movement toward greater use of cost recovery techniques, but the rate of movement, though significant, is certainly not a landslide.

Extent of Use

It is quite clear from the responses, in particular from an analysis of the comments which the respondents were very generous in providing, that very few libraries use cost recovery schemes for more than a very small proportion of their expenses. In retrospect, the one question that the investigators regret not having included in the questionnaire was "What percentage of your expenses would you estimate are the subject of a cost recovery scheme?" In reading through the responses, extrapolating from both the comments, and the responses about which services were and which were not subject to cost recovery practices, it seems clear however that of the respondents to this survey, only two, both special (corporate) libraries made what might be called extensive use of cost recovery techniques, (in both cases recovering more than 90% of their expenses) and that all of the other respondents used cost recovery techniques for only a very small proportion of their expenses.

Conclusion

Most libraries use cost analysis or cost recovery techniques to some extent. More libraries recover some of their costs than actually participate in cost allocation of any detail or complexity. In most libraries cost recovery is used for only a few services wich contribute a rather small proportion of the libraries budget. Academic and public libraries were more likely to engage in cost recovery of at least some of their expenses than were special libraries, but only special libraries reported large scale extensive cost recovery procedures.

Judging from the respondents comments, which were many, cost recovery is used, in descending order of importance for the following four reasons:

- budgening pragmatism

  It is very convenient to shift difficult to predict costs (such as database vendor charges) to the user. The library then need not predict and budget for them.

- filtering and apportioning mechanism

  If the library were to provide some services such as online searching free to the user, it would have to do so from a limited budget and make difficult choices about who could be offered what services under what circumstances. Charging deters frivolous use and it also deters excessively resource consuming demand, and it functions as an easily implementable apportioning mechanism.

- the provisions of services not otherwise feasible.

  As one respondent put it succinctly: "Charging fees also allows the library to offer services that would not otherwise be possible to offer".

- institutional pressure to allocate and recover costs.

What is clear from the above, is that at this point, cost recovery is still very much a procedure undertaken for the convenience of library operations and of the library staff. Outside, including institutional, pressure is still a very minor reason for implementing cost recovery, but it is a growing reason. Numerous libraries commented that they were under some degree of scrutiny or pressure that was likely to cause them to have to look more closely at their procedures for cost allocation and cost recovery. This situation, for the cost allocation and cost recovery. This situation, for the reasons outlined in the background discussion, is only likely to become more common, but it will not be an overnight change.

Finally, the more exposure to cost allocation and cost recovery techniques, the greater is the degree of comfort felt by librarians with such procedures, and the more likely librarians are to report finding such techniques helpful rather than detrimental to the provision of library service.

While this study examined only three countries, with very incomplete data from one of those, it seems quite defensible to conclude that while there are some differences by country, the assertions in this section are quite generalizable across the three countries. Indeed the authors observed more similarity than they expected to find. This finding seems consistent with the thesis that the use of cost recovery in libraries is primarily a function of operational pragmatism, and not so much a function of goals and objectives and service philosophy. If this is true, it implies further that the responses of libraries around the world to the pressures discussed in the introductory section, are likely again to be driven primarily by operational pragmatism, and therefore they are likely to be quite therefore an issue of broad and common interest across librarianship.

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APPENDIX A

SURVEY QUESTIONNAIRE
COST RECOVERY IN LIBRARIES

Thank you for participating in this international survey of cost recovery/cost allocation methods in libraries. Please answer the following questions regarding the allocation of costs and cost recovery programs, by checking off the appropriate boxes on the form and writing in your comments at certain questions. An explanation of the terms used in the questionnaire can be found on this page.

At the end of the questionnaire you will find a comment section which can be used for any additional comments or information that you believe should be an integral part of this survey. Your responses will be kept confidential and will be used for statistical analysis only. All participants who wish to receive a copy of the tabulated results of this survey are asked to list their name and address on the last page.

DEFINITIONS:

Cost allocation is the process of identifying what proportion of the costs incurred in running a library are appropriately attributable to the specific users or units served or to the outputs provided by the library. Also referred to as cost apportionment. Cost allocation is useful for managerial decision making, whether or not any cost recovery mechanism is implemented or contemplated.

Cost recovery is the process of transferring the costs of running a library to the users or units served, through either direct charges or budget allocations, thereby "recovering" in full or in part the costs of running the library. Generally, though not necessarily, cost recovery is based on a cost analysis study and a cost allocation scheme.

Pricing is the setting of fees, often with partial or full cost recovery in mind, but there is no necessary relationship between price and cost.

QUESTIONS

1. Does your library use any type of cost allocation system? ☐YES ☐NO

If you checked "No", please continue with question # 2

A. If you checked "Yes" is the allocation made:

☐ a. to operating units (e.g. Marketing Department)

☐ b. to products or product lines

☐ c. other (please describe ________________)

B. Are allocations made:

☐ **a. at the time the service is performed**

☐ **b. calculated periodically based on statistics kept, including sampling**

☐ **c. other (please describe ________________________)**

C. Has your library had a cost allocation system and abandoned it? ☐ **YES** ☐ **NO**

If yes, why? ________________________

____

____

D. Is your library contemplating or planning to implement a cost allocation system? ☐ YES ☐ NO

Comments: ________________________

____

____

2. Does your library use any type of cost recovery system for some or all of the services offered by the library? ☐ YES ☐ NO

* **If you checked "No", please continue with question no. 6**

* If you checked "**Yes**", please continue with question no. 3

3. If you answered **Yes**, please indicate what type of cost recovery policy your library uses by placing a checkmark in the box next to each applicable answer on the next page.

When did you start to use cost recovery for library services? ________________

A. Fee-for-service cost recovery method

☐ *Direct costs* (directly related to the library activity performed)

☐ Flat fee (fixed price) structure

☐ Variable fee structure

☐ Flat fee and direct cost over a certain level

☐ *Indirect costs* (salaries, site licenses, rentals, training, supplies, etc.)

☐ Per employee or student fee

☐ Cost for librarian assigned to research teams

☐ Research proposals include researcher's time

☐ Other (please describe)

____

B. Assessment by department or user group

☐ fixed annual assessment

☐ variable annual assessment based on:

☐ intended use of library resources by the department or user group

☐ actual use of library resources by the department or user group

Comments:

____

____

____

____

4. In terms of specific cost recovery programs in place in your library, please indicate which of the below-mentioned services are charged back to the library users by checking off or filling in only the items that apply:

Manual reference searches ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % ________

☐ Flat fee per employee/student
Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount /% __________

☐ Other method (please describe): ________________________

Fees for on-line searches ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % ________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% __________

☐ Other method (please describe): ________________________

Question 4 - continued

Document Delivery Service ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% ___________)

☐ Other method (please describe): ______________________________

Interlibrary loans ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% ___________)

☐ Other method (please describe): ______________________________

Question 4 - continued

Production of custom bibliographies ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% ___________)

☐ Other method (please describe): ______________________________

SDI service ☐ YES ☐ NO
(Selective Dissemination of Information/Current Awareness Service)

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% __________

☐ Other method (please describe): ______________________________

Question 4 - continued

Photocopies ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% ___________)

☐ Other method (please describe): ______________________________

Consulting services ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% ___________)

☐ Other method (please describe): ______________________________

Question 4 - continued

Translations ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% __________

☐ Other method (please describe): ______________________________

Indexing ☐ YES ☐ NO

☐ Direct cost only

☐ Direct cost plus an allocation for indirect (overhead) costs

Please indicate add-on percentage
or amount $ ____________ or % __________

☐ Flat fee per employee/student

Please indicate amount: $________

☐ Sliding scale method

☐ Partial fee (please indicate amount/% __________)

☐ Other method (please describe): ______________________________

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5. Do you use cost recovery for services rendered to third parties (community members, services to business and industry, unaffiliated individuals)? ☐ YES ☐ NO

If yes, do you use different rates for primary and non-primary clientele? ☐ YES ☐ NO

If yes, what formula are you using?

☐ Standard rate + ____ % surcharge

☐ Standard rate + ____ fixed fee surcharge

☐ Standard rate x ____ multiplier surcharge

OR:

Do you have subscription fee or other contractual arrangement with other institutions/organizations that you provide library services to? ☐ YES ☐ NO

If yes, please describe the prepaid subscription or membership fee structure?:

____

____

____

6. If you answered "No" to **Question 2**, please indicate which of the following statements applies to your library:

☐ A. Library costs are treated as part of the parent organization's overhead expenses.

☐ B. We do not have a cost recovery program in place but we are in the process of developing a strategy for instituting a cost recovery system.

Comments: ______________________________

☐ C. We are not planning to institute a cost recovery program but have considered doing so in the past.

Question 6 - continued

☐ D. We have used a cost recovery system in the past and discontinued it.

Comments: ______________________________

☐ E. We do not have a cost recovery program and do not plan to use a cost recovery system for library expenses in the foreseeable future.

7. What type of budget is used for the library?

☐ A conventional line item budget (one budget line for each type of expense: e.g. subscriptions, telephone service, etc.)

☐ Some form of program budget (the line items are allocated to different functions performed by the library, e.g. current awareness service, or allocated to different units served, e.g. marketing department)

☐ Other (please describe ______________________________)

8. If you are now using a cost allocation and/or cost recovery system, do you perceive it to have been helpful or detrimental to library service?

☐ Helpful ☐ Neutral ☐ Detrimental

If helpful, how would you characterize it on the scale below?

(very helpful) 5 4 3 2 1 (mildly useful)
(please circle appropriate number)

If detrimental, how would you characterize it on the scale below?

(very detrimental) 5 4 3 2 1 (mildly detrimental)
(please circle appropriate number)

Comments: ______________________________

____

____

COMMENTS:

Please use this section for any comments you may have on the subject of cost allocation and/or cost recovery in libraries:

____

____

____

____

____

Respondent: ______________________________

Library ______________________________

Street address ______________________________

City/State/Province ______________________________

Zip/postal code ______________________________

Country ______________________________

Please check off type of library:

☐ Special ☐ Academic ☐ Public ☐ Government

Please return this questionnaire to:
Michael E.D. Koenig
Graduate School of Library and Information Science
Rosary College
7900 W. Division
River Forest, IL 60303

before April 1, 1991

THANK YOU VERY MUCH FOR YOUR PARTICIPATION IN THIS SURVEY! IF YOU HAVE PROVIDED YOUR NAME AND MAILING ADDRESS WE WILL SEND YOU A COPY OF THE TABULATED RESULTS UPON COMPLETION OF THE SURVEY.

117-PB-7(WS)-E

Management education and training for librarians in Scotland

Ian M. Johnson
Head of the School of Librarianship and Information Studies,
and
C. Stuart Hannabuss
Lecturer in the School of Librarianship and Information Studies,
and
David M. Wildgoose
Senior Lecturer in the Business School,
The Robert Gordon Institute of Technology, Schoolhill, Aberdeen, Scotland, UK.

Abstract

This paper is a report on research into management education and training for librarians, which was initiated and funded by the Library and Information Services Committee (Scotland) [LISC(S)]. In outlines the origin of the proposal in the current debate about management education in the United Kingdom (UK), and in the growing concern to ensure that librarians' managerial abilities are fully developed. It provides background material on management education in Scotland, and on the provision of short courses in management for librarians in the UK.

A survey of Heads of library and information services and the managers who report to them was undertaken in early 1991 to identify the management competences required by librarians. The resources available for staff development were investigated, as were the relative priorities attached to management development compared with general professional development. The review found that managerial development has clearly been identified as organisationally or personally important by some librarians. However, it appeared that the overall perception of librarians as managers is still low. There was a very considerable diversity in support for management development in Scottish libraries. The review concluded that, at the moment there does not appear to be a basis for a programme of management education and training specifically for librarians. The increase in financial allocations require to sustain such a programme would be unrealistic in present circumstances, and librarians should to make more use of alternative, in-service methods of management development.

The Changing Face of Library Management

Managers are people who are responsible for the development and delivery of products and services, and for the human and material resources required to fulfil that purpose. By this definition, all librarians are managers from the moment that they commence their professional careers. They work in a specialist environment in which they also practice their profession, and the level of their responsibilities varies, but they cannot fulfil their professional aims and objectives unless they also manage effectively the resources at their disposal. A recent document issued by the Library Association (1), intended to outline to employers what librarians do, describes their work in a way explicitly and implicitly emphasises the managerial responsibilities.

The demands on the librarians managerial abilities have grown noticeably greater in recent years. Information sources are much more complex than they were. In addition to an enormous growth in the publication of printed materials, the emergence of electronic information has added a new dimension. Electronic sources offer ready and rapid access to information, but they raise financial issues for the library manager in meeting the charges for information, and in making the investment in equipment. Allforms of automation raise personnel management issues, not least that of re — training staff.

Libraries do not operate in isolation. They all exist within the framework of some larger organisation and exist to serve its corporate aims. The information explosion has raised the contribution which libraries can potentially make to the achievement of those corporate objectives, and a greater emphasis on the marketing of library services is necessary to enhance their effectiveness.

Nor are libraries isolated from the philosophy which currently permeates business and government — effectiveness, efficiency, and enterprise. These represent a threat to badly managed library services, and challenge the library manager to plan and develop relevant services.

The occupational environment for librarians has also changed. Many large organisations are amalgamating functions, partly in search of economies. Their main aim, however, is to create a greater cohesion and synergy in the achievement of corporate aims. Libraries have been affected by this kind of reorganisation in local government, academic institutions, the health service, and business. The new, enlarged units present new challenges for library managers who have a broad vision of the corporate aims, and a perpective which incorporates an understanding of the purpose and activities of the services with which the library has been associated. Personal ambition, and proven managerial abilities, offer the librarian new career opportunities in a larger unit.

The demand for information and for expertise in its retrieval has led to the establishment of libraries where none previously existed (e.g. in many schools, hospitals, professional practices and commercial companies). Initially, employers were uncertain about the potential contribution of these libraries to the achievement of corporate objectives. This depressed the salary levels of many of these new posts to the point where they attracted only relatively recently qualified librarians. Thus many librarians early in their career became Heads of services. They had the range and level if not the size of responsibilities of senior managers in the older established large library services.

National Developments in Management Education

In recent years there has been considerable discussion about the extent and quality of management training and education in the UK. Representatives of both industry and government have called for a fresh approach. Particular attention has been focused on the training and education of those entering managerial posts and the relationship between training at that initial level and subsequent development.

Following the publication in 1987 of the reports by Handy (2), and by Constable and McCormick (3), a national debate on management education and training has ensued. This debate has revolved around the work of the National Forum for Management Education and Development (NFMED) which launched, in 1988, the Management Charter Initiative (MCI) to promote the concept of a coherent structure of educational qualifications for managers. Considerable work has also been done in identifying core competences for managers at different levels. The MCI proposals (4) are intended to make education and development of those in junior management positions less theoretical and more closely related to the demands of managerial jobs, but some controversy surrounds the problem of translating the competence statements into educational programmes.

Education and training for library management

The growing complexity of library and information services has focussed increasing attention on their management during the last 20 years. The Library Management Research Unit was established at Cambridge in 1969 to provide a focal point for the investigation of problems in university library management. The Unit was subsequently relocated at Loughborough University, where it was renamed the Centre for Library and Information Management (CLAIM) in 1979, and had its scope broadened to include all kinds of libraries and information centres. During the last ten years of its life, its overall aim was:

"to improve the effectiveness of services in the field through the provision of information, investigation, continuing education and consultancy services..." (5)

Financial support for CLAIM was reduced in the 1980s by the British Library Research and Development Department, and finally ceased in 1987. Nonetheless, interest in the post-qualification training of librarians had increased. In the mid-1970s the Library Association initiated a research project to investigate the adequacy of management training for librarians. This identified a widely perceived need for management training, and recommended the establishment of a regular pattern of courses on certain topics. (6) There was, however, no successful attempt to implement these recommendations.

Throughout the 1970s and 1980s much debate and development took place within the Schools of Librarianship as they re-orientated their courses from "library administration" to "library management" to meet the needs of a changing job market. (7) Employment data suggests that newly qualified professional librarians are now employed in equal proportions in public library systems and in small specilist libraries. The proportion employed in these special libraries as their first job is growing , and there is evidence of a marked movement of staff from public libraries to special libraries within the first five years of their careers. The educational changes were intended to prepare librarians to be managers of small units in large organisations, and the underlying principles are as relevant in small units within public libraries as within, say, commercial organisations. However, there is regular research evidence of low levels of job satisfaction amongst professionally qualified staff in libraries. This suggests that some established library services may not have responded to these educational changes by reviewing the managerial resposibilities of professionally qualified librarians in the lower levels of their hierarchies.

Some Schools of Librarianship and Information Studies developed post-qualification Masters Degrees with a strong bias towards management. However, in the late 1980s Ritchie demonstrated that these attracted only one in four of librarians studying for advanced qualifications in management, and that most of the rest were taking courses leading to more generally recognised management qualifications. (8)

Attempts at collaboration between Schools of Librarianship and Business Schools to tailor management qualification courses to the needs of library managers have been few in number.

In the early 1980s Ealing Technical College offered the Diploma in Management Studies (DMS) Course with an option in Library Management, but this has been discontinued. There were no similarly oriented courses developed until 1989 when Sheffield University began to offer a programme in Information Management leading to the Masters degree in Business Administration (MBA). In 1991 Heriot Watt University Business School and Moray House College (both in Edinburgh) announced the establishment of a new jointly taught MBA in Arts Administration, uncluding an elective in Library Management. This arose from an investigation into the training needs of arts administrators in Scotland. Details of the MBA programme and the Library Management course have yet to be published, and arrangements for the tuition of the course have not yet been finalised. However, it seems that the Library Management option will be targeted at arts administrators who have no previous experience of library management to broaden their capabilities.

Towards the end of the decade attention began to focus more on the needs of top managers in libraries. During the late 1980s the Local Government Training Board provided some input into training for public library management, and were critical of the patchy nature of management training, even for chief librarians. (9) In 1988/89 a further initiative was funded jointly by International Computers Limited and the Office of Arts and Libraries under the government's Public Libraries Development Incentive Scheme. Funding was awarded to the London and South Eastern Library Region (LASER) to co-ordinate a survey of staff training needs in a number of public library systems in its area.

The study (10) concluded that training is needed in many areas of library work, but that in the first instance priority should be given to management training and to providing library staff with the skills which they need to deliver training. However, the Office of Arts and Libraries declined to award further funding for 1989/90 to follow up the proposals.

More recently, Robert Hayes, the former Dean of School of Librarianship at the University of California at Los Angeles undertook a study of senior management training needs in all kinds of libraries in Britain whilst based at Loughborough University as a visiting professor. (11) This was little more than an evaluation of reaction to proposals to established an American style "Senior Fellows" programme for selected top managers and "high fliers". This has proved a controversial proposal, but the British Library's Research and Development Department nonetheless invited tenders for the organisation and presentation of such a course. The contract has been awarded to a consortium of libraries, educational institutions and consultants in Leicestershire.

Librarians and continuing education

During the last twenty years, a variety of continuing education activities have been provided for librarians, by Schools of Librarianship and by a variety of other providers. These have taken the form of courses leading to avanced qualifications, and short courses.

Formal advanced study of librarianship and library management seems not to motivate librarians, perhaps because they could see few career opportunities. Ritchie's investigation suggested that in 1987/88 about 1% of librarians were taking a course leading to a further qualification in management. (8) Interestingly, Ritchie found the highest participation rate amongst the 30-40 years olds, whom one might expect to be in middle management.

Courses leading to advanced qualifications in librarianship and library management have generally enjoyed only a short period of success before enrolments have declined. The most recent initiative, a distance learning programme established by the University College of Wales Aberystwyth in 1985/86 does seem to be maintaining its enrolment target of c.30 students each year. Nonetheless, because of changes in personnel and a shift in the market, the original single focus on management subjects has been diluted by the introduction of an option in library work with young people.

Short course provision for librarians has grown enormously in recent years, and there are now perhaps more than 500 events being organised each year.(12) In-service training in libraries has also grown, and now accounts for perhaps 40% of all training activity. (13) Participation in management training appears to account for about 25% of in-service and external short course activity.

The growth of in-service training reflects not only an increased appreciation of organisation-specific activity, but also budgetary restraints. Bird identified the low level of financial provision for staff development in public librarires (14), which averaged 10-15 pa. per member of staff in 1985. In MacDougall's study of all kinds of library, time and financial constraints were cited as the major reasons for non-participation in continuing education. (12)

Over 150 organisations are involved in providing continuing education for librarians. (15) According to an analysis of the "Professional Calendar", only about 2% of short courses are provided by the

Schools of Librarianship. (16) MacDougall's analysis of participation confirms this and moreover indicates that only a further 4% of short courses are provided by other educational institutions. (12)

Notable among the providers in recent years have been the professional associations (including latterly the Scottish Library Association), and co-operatives (17) such as the Central Scotland Training Group (established in 1976) and the Scottish Academic Libraries Training Group (1985). The latter has arranged management courses each year since it was established, and has conducted its own survey of management training needs in 1990, and the results will influence the contents of its courses in the next few years. The former has been relatively inactive because of the establishment of the academic libraries group and the growth of in-house training units in Local Authorities, but seems to be attempting a revival.

Aims and objectives of the review

Scotland accounts for about one third of the land area of the Uk, but only about 10% of the population. Its geography, history, politics, economic structure, and culture have created institutions which are separate from those of England and Wales, and which are distingly different in their value judgments. LISC(S) shared the general concern about the managerial development of librarians, and was aware of the debate provoked by the Hayes' review. LISC(S), however, took the view that it was important to develop the managerial abilities of all library staff, and not just a small, elite cadre. During the summer of 1990, a number of organisations were invited to tender proposals for a review of management education and training for librarians in Scotland. The contract waas awarded to a team from the Faculty of Management of The Robert Gordon Institute of Technology (RGIT), Aberdeen, comprising two staff from the School of Librarianship and Information Studies, and one from the Business School. The work was carried out between October 1990 and March 1991.

The aim of the review, prescribed by LISC(S), was to investigate the need for the provision of management education for mid- career professional librarians in all types of library, concentrating on middle and senior management levels. The specified objectives were to:

— identify management competences and skills necessary at different career levels, relating these to existing and likely future job needs.

— review existing provision — examine what is available and what can be provided by external agencies, e.g. MBA, DMS programmes, Local Government Unit, Industrial Society, etc.

-- study the profession's perceptions of provision, and the pattern of uptake.

— identify gaps in existing provision.

— make recommendations as to future provision, and propose a development plan.

Management education in Scotland

A review of the management courses offered by educational institutions in Scotland was undertaken by circulating a request for information to all the universities, and the non-specialist Central Institutions and Colleges of Further Education and by examining directories of courses.

It was noted that increasingly the courses in Colleges of Further Education are being brought into line with the MCI Certificate, the first level of management qualification, and/or will be available in modular form, enabling librarians to participate in selected units which meet particular needs.

Almost all librarians in the UK are now university gratuates, and more appropriate levels of formal qualification for middle and senior managers are the DMS and the MBA. These are available on a part-time mode in all the major population centres, and also in distance learning modes. None of the courses in Scotland yet offer specific units for library managers, but the integral projects and dissertations offer frequent opportunities to apply management principles to the workplace.

In addition there are a number of part-time post-graduate or post-experience courses available in Scotland specialising in aspects of management, particularly human resources management and marketing, which may be relevant to some aspects of library management.

Distance learning has become an increasingly popular medium for continuing education, and it was noted that a number of Scottish librarians are studying management through a distance learning mode, particularly the Masters degree programme offered by the Department of Information and Library Studies, University College of Wales Aberystwyth.

It should also be noted that most of the educational institutions in Scotland which offer management courses also offer short courses in particular management topics. Some are open to any applicant, others are available to any client organisation, and it was claimed that they can be tailored to meet specific needs. In the public library sector, the establishment of the Scottish Local Government Management Unit at the Strathclyde Business School, with support from the Convention of Scottish Local Authorities, should be noted. The Unit operates on a cost-recovery basis in providing courses for individual local authority departments, and aims to develop training expertise in specific fields which can be applied in all local authorities. It is currently in discussions with one district public library service in response to an approach for management development training for the library staff.

Short courses for librarians in Scotland

An analysis was made of the short courses (including meetings, conferences etc) held in the UK in the first six months of 1990. This was based on the calendars of events published in "*Scottish Libraries*", the "*Library Association Record*", "*Aslib Information*", "*Inform*" (Institute of Information Scientists), and the "*Professional Calendar*" compiled and published by the Library of the Department of Information and Library Studies, University College of Wales Aberystwyth. Further information was provided by the Scottish Library Association (compilers of "Hot line", a listing of professional meetings in Scotland), the Central Scotland Training Group and the Scottish Academic Libraries Training Group.

According to these sources there were 1,185 relevant events scheduled in January-June 1990, of which 99 (8%) were to be held in Scotland. Closer examination suggested that perhaps 225 were on topics relevant to management development, of which 18 (7%) were to be held in Scotland. It was not possible from the information available to assess the level at which most of the courses were presented.

There were a number of occasions when two or more events were scheduled on the same day in Scotland. Although these would not necessarily attract identical audiences, they might attract the interest of staff from the same libraries, possibly presenting managers with decisions about priorities for e.g. covering the duties of staff who wished to attend. Use of the Scottish Library Association "Hotline" by event organisers could help to minimise these problems, but the availability of speakers, meeting rooms, etc. will always be the final arbiter in fixing dates for events.

These was no evidence that any particular organisation took responsibility for regularly arranging management development activities.

In many cases, publicity for an event appeared in the professional press only a few weeks before the event actually took place. Publicity for the events in Scotland were scattered in a number of sources. "*Scottish Libraries*" listed only 21 of the 99 events. "Hotline" listed 34. The "*Library Association Record*" listed 26. The "*Professional Calendar*" included the largest number (51) but these were almost entirely events which had been organised on a national UK basis. It omitted many events arranged locally in Scotland.

Support for management development

Identification of management competences required by librarians was attempted in questionnaires sent in early 1991 to Heads of library and information services and to managers who report to them. A basis for consultation was a much simplified version of the Occupational Standards for Managers which have been produced as part of the Management Charter Initiative.

The profession's perception of provision and the pattern of participation was elicited in the same enquiry. Information was also elicited on resources available for staff development, and the relative priorities attached to management as compared with general professional development.

The survey was based on a representative sample of 50 of the libraries and information centres listed in the directory of Scottish Library and information resources. Of the 100 questionnaires distributed, some 60 were completed.

Managers in any organisation are those whose efforts are concentrated on leadership and organisation. The definition of the mid-career middle or senior manager proved to be beyond a generally acceptable definition. Middle and senior managers were mainly defined by their Heads of service on the basis of their hierarchical position or salary grade, or by the level and breadth of their resposibilities for staff, budgets and services. However, some Heads employed a definition which encompassed all professional staff. Defining "mid-career" proved as difficult. Again the Heads were asked to provide their own definition, and again there was a variety of responses. Definitions pointed to age (35 to 45 was mentioned be several respondents) and to experience (3 to 25 years). All those in promoted posts were also mentioned, one respondent specifically reffered to staff whose career within the organisation had reached its ceiling. Notwithstanding the problems of definition, there appear to be at least 700 professionally qualified librarians in Scotland whose Heads of service would place them in the proscribed category. As a potential audience for management education and training this is not an insignificant number.

The majority of managers reported that they had received no management training prior to their appointment as middle managers, nor any prior to their further promotion to senior management. Most senior managers have received some management training since their appointment at that level.

Provision made for staff development can be significantly influenced by the assignation of responsibility for training, and by the extend to which positive steps are taken to identify and respond to training needs. Responsibility for organisation and initiating training has been clearly assigned in most libraries, but there appear to be some Scottish libraries where this vital responsibility has been neglected.

A systematic analysis of the needs for job training and individual development can provide an objective assessment of what is required to enable the library service to meet its agreed objectives, and puts training in its proper place in the priorities for financial allocations. It was encouraging to note that needs analysis is increasingly practised, but there was clearly scope for its more widespread adoption.

Training budgets appear low in comparison with the costs of training, except in some academic institutions and commercial companies where relevant staff development tends to be comparatively well supported. However, freeing staff time to participate in training was seen as more significant barrier to management development.

In a significant proportion of library and information services, the budget for training was controlled outwith the library service, and could therefore be subject to organisational priorities which may differ from those of the library service. Whilst most libraries appear reasonably free to take advantage of any appropriate training, some libraries appear to be severly constrained by institutional procedures and/or finance.

All managers recognised the need for expertise in managing people and in managing budgets. Priority training needs were identified in the areas of staff and budgetary management, planning, and automation. A mixture of action-learning and relevant short courses were seen as the appropriate training media to meet these needs.

The priority attached to managerial development of middle and senior managers tends to be seen by their Heads of services in a purely pragmatic light. They indicated that they support whatever is needed to contribute to the smooth and efficient operation of the library service. On the other hand, management development was seen by middle and senior managers as their highest priority.

It appears that in any one year about 2% of the middle-management of Scottish libraries (about 14 people) commence a programme of study leading to a formal qualification in management. Heads attitudes to different methods of management development suggest a somewhat piecemeal approach is taken to preparing middle and senior managers for their responsibilities. Most Heads appeared to have no appreciation of the need for individuals to undergo a comprehensive programme of management development. If they did appreciate it, they alleged that they were constrained by the available resources.

During the last year a wide variety of short courses in management topics were attended by librarians. However, staff from more than one third of the libraries responding to the survey did not take part in any management short courses during the year.

Heads of service were willing for their middle and senior managers to spend around 10 days each year on management development activities. Absences from the workplace of 2 consecutive days would be acceptable to them. Managers were generally prepared to devote 5-7 days to management development activities each year, and preferred courses of two or one day in duration. Managers were mostly willing to invest their own time in their management development, but most expected costs to be met by their employers.

The managers' preference was for training to be organised in Scotland, preferably in their own locality. Off the job training, with perhaps some combined element on the job, is their preference. Heads also felt that training in larger library systems could combine on the job activities with off the job training. For smaller libraries, only off the job training was viable. Training should be based in Scotland, in the Heads' view, preferably as close to the workplace as possible.

Business School lecturers are seen by Heads of services as those most likely to be able to provide the inputs required, possibly allied with external practitioners or lecturers from Schools of Librarianship to ensure the professional relevance of the content and presentation. Overall, managers also indicated that Business School lecturers were the most appropriate people to provide management training, but a wide variety of views were held, depending on their perception of who might be asked to do what.

There was a general feeling that current provision for middle and senior managers is poor, but improving. There appears to be some potential for educational institutions, the professional bodies, and the training co-operatives to analyse the markets needs more effectively. More attention also needs to be given to promoting what is available. Persuading employers of the importance of management development and developing their understanding of how managers could best be developed was also identified as an issue to be addressed.

Summary and conclusions

Librarians are increasingly recognising that they are indeed managers in a professional/technical environment. It was encouraging to see the interest being taken in management by some library managers. Managerial development has clearly been identified as organisationally or personally important by a number of librarians. However, it appeared that the overall perception of librarians as managers is still low, amongst librarians almost as much as amongst their employers. It is particularly important to raise employers'' perceptions of librarians as managers, and to encourage them to provide more support for appropriate management development. This will require collaboration with all those responsible for librarians' training to review librarians' career development in their sectors and to identify the consequential training needs.

The development of any librarian as manager begins with initial professional education and is enhanced by experience, training and by continuing education throughout a career. Management development should not be deferred until staff are in mid-career or have been promoted. It is important that newly qualified professional librarians should begin to build on the foundations of management education in their qualification course at an early stage in their career, and that throughout their careers this should be reinforced to raise their perceptions of themselves as managers. The provision for librarians' management development in the early post-qualification years needs to be reviewed.

Librarians in mid-career, regardless of their position in a hierarchy, represent a major reserve of experience and an investment in professional training which must be capitalised to maintain the momentum of the organisation. They may also be at a watershed in their professional life, having reached a plateau in the hierarchy from which they could progress or where they could stagnate. Management development is clearly the key to progress and a challenge to stagnation.

The placing of librarians work in the broades context of information management presents opportunities for the personally ambitious librarian with developed managerial abilities. A strategic view of the advantages for the professional suggests a need to support those who could be aspiring to such levels.

There is a very considerable diversity in support for management development in Scottish libraries, with notable variations between the different sectors of library service and within each sector. It is encouraging to note that some employers are providing more substantial support for staff development. However, the increase in financial allocations which others would need to make to raise their expenditure levels on staff development to match best practice, let alone what might be considered ideal, is such that in present circumstances it would be unrealistic to expect rapid and significant improvement. The diversity in financial support (and in attitudes) is so great that at the moment, regrettably, there does not appear to be a sufficiently strong basis for a unified programme of management education and training specifically for librarians which meets the needs of all the various sectors.

The comprehensive development of management skills may for some staff be best accomplished through a formal course of study leading to a recognised management qualification. In due course, the demand for formal courses which embody general management principles in the context of library and information management may be sufficiently strong to make such course viable. At present this does not appear to be the case, and librarians in Scotland must be encouraged to take more advantage of the existing provision of Business School courses leading to nationally recognised qualifications in management, especially the DMS and MBA.

The present provision for management training in terms of short courses in Scotland is both underdeveloped and uncoordinated. There appears to be a need:

— to conduct an annual survey of training needs in Scotland, to identify common priorities for professional and managerial development. (This would enable the training agencies to prepare and publicise their plans for courses to be held in the following year, would remind employers to regularly assess the training needs of their staff, and would enable them to earmark funding for courses which they could be reasonably sure of taking place.)

— to gather information about the proposed activities of the major speculative providers of open events (e.g. LA groups, IIS, the Business Schools, etc.), to ensure more effective and more advance publicity for events, and to attempt to co-ordinate these activities.

— to encourage the establishment of more training co-operatives.

— to encourage the development of self-help, special interest groups in the growing special library sector.

— to encourage the implementation of alternative means of management development such as in-service coaching and counselling, and planned work experience (teamwork, problem solving, etc.).

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Current Trends in the Development of Automated Technologies in Large Multi-branch Libraries (based on the experience of the USSR National Public Library for Science and Technology)

Jakov L. Shraiberg

Chief Designer of the Automated Library Systems and Networks, The USSR National Public Library for Science and Technology

1. Introduction

Automated (computerized) library systems are indispensible today for the development of library activity. Various forms of activity carried out by large multi-branch libraries need a relevant computer support and computer realization.

While the dawn of library automation was marked by the attempts to automate traditional and rather tiresome library routines like order, acquisition and inventory control, the primary focus of today's automation is the main library task — improvement of user services. That means that libraries create online catalogues based on their collections, i.e. they form automated information retrieval systems that enable the users to search for primary sources and consequently request them. The automation covers currently both traditional and non-traditional forms of library activity such as production of indexes and library catalogues, telecommunication services and access to the library collections, formation of subject and problem-oriented local systems and databases.

On the one hand, automation is required by the ever-growing list of library services, on the other hand, constantly developing hardware and software give birth to new automated user services and new technologies for library routines. Additionally, the integration of library resources and the increasing variety of forms of library co-operation provide for the development of joint automated technologies and telecommunication interlibrary interface. Finally, the rapidly evolving information centres that generate bibliographic and factographic databanks with well-organized automated access systems promote the development of library technologies giving access to these databanks and improve thus the user services. These factors form a background for the main trends in the automated library technologies that are analysed in the present survey with respect to the latest achievements in hardware, software and information technology. The survey is based on the development policy adopted by one of the major multi-branch libraries of this country — the USSR National Public Library for Science and Technology (later referred to as "the Library").

2. Short Description of the Library's Automated Resource

The USSR National Public Library for Science and Technology is the main library of this country covering natural sciences, technology, applied economy, agriculture and other subjects. The Library currently holds some 9 mln items of domestic and foreign literature: books, serials, unpublished translations, preprints, author's abstracts of thesis and others. The Library is an interbranch research and methodological centre for scientific, technical and special libraries of the USSR, it is responsible for the All-Union Joint Catalogues of Domestic and Foreign Literature on Science and Technology. The Library is a large computer centre with a well-organized telecommunication access system to its information resource.

The functional structure of the Library's computer centre is depicted by Fig.1.

The first layer is presented by two big computers of EC-1055 and EC-1037 types (C1 and C2) (some 4 Gb of direct access memory) and a well-developed local teleprocessing system (T1) with nearly 40 terminals. This layer supports and maintains the Library's automated databank (ADB) that contains some 1 mln records.

The teleprocessor EC-8371 provides for telecommunication access to the Library's ADB, to external databanks and networks through the channels of two types: switched telephone public networks with modems according to

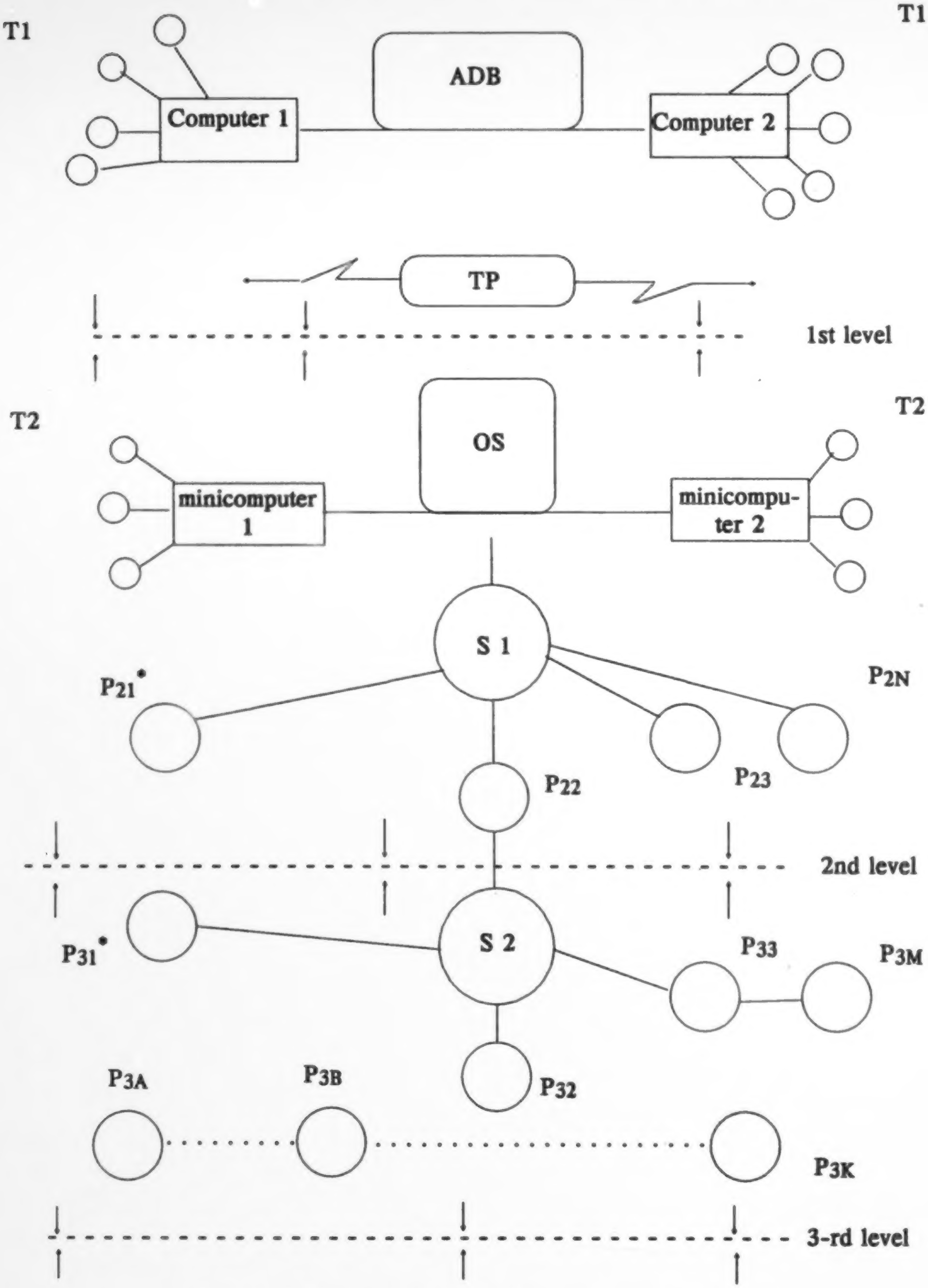
T1
T1
ADB
Computer 1
Computer 2
TP
1st level
T2
T2
OS
minicomputer 1
minicompu-ter 2
S 1
P21*
P2N
P22
P23
2nd level
P31*
S 2
P33
P3M
P3A
P3B
P32
P3K
3-rd level

Fig. 1. The Structure of the Library's Computer Centre

the protocols V21 MKKTT and allocated communication channels according to the protocols V24 MKKTT.

The second layer has two CM 5212 minicomputers with the same number of terminals (T). This layer handles the Library's online catalogue (OC). The necessary OC support is provided by the local network (P21-P2N) with a highly productive file server S1 based on IBM PC/AT 80386. The information and technological link of the two layers is maintained by the adaptors mounted on several PCs. They emulate PC as a minicomputer terminal and carry out a bilateral file exchange (the interlinked workstations of the second layer are marked by asterisks on Fig.1).

The third layer comprises workstations capable of functioning both within the local network (P31-P3M) and offline (P3A-P3K). In the standard case they are personal computers of the IBM PC/AT type with microprocessors 80286/87. They are characterized by 12-20 MHz of clock frequency, 1 Mb of the main memory and 40 Mb on hard disk. The two servers (S1 and S2) possess higher parameters: 4 Mb of the main memory, 120 Mb on the "Winchester" disk and 25 MHz of clock frequency.

The local ARCNET/NOVELL network comprises 30 PCs. The total number of the Library's PCs is above 70. Several PC-based workstations are connected to the computers of the first layer in the emulation and file-exchange modes and provide a complete information compatibility of software, hardware and technology on all the layers of the Library's hierarchy. PCs of the third layer handle the local tasks of the Library's ADB and OC as well as the interlinked automated library technologies and management tasks.

3. Network Information Technology

Network Information Technology having several functional components opens up new vistas for the library automation. Fig. 2 depicts a model of a generalized network structure presented in the form of a directed graph. The nodes stand for functioning centres 1-N and arcs (a_{ij}), $i,j=1,N$ indicate their information interaction.

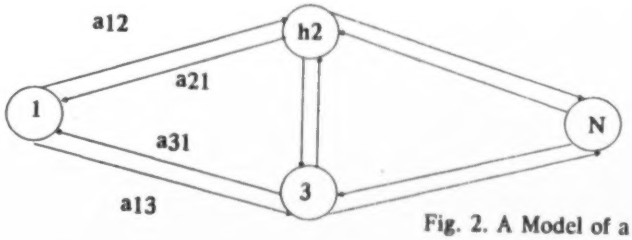

Fig. 2. A Model of a Network Structure

A rather well-known model of a functioning network structure is a queueing network. It represents network systems with respect to the stochastic character of the input and circulating information flows.

The first functional component of the network information technology is automation of interlibrary communications based on computer facilities and modern telecommunication equipment. The creation of a highly developed interlibrary telecommunication interface solves the tasks of:

a. joint databanks formation;

b. joint cataloguing;

c. improvement of Interlibrary Loan services;

d. formation of a mobile expert system for developing long-range goals and coordinating order and acquisition of literature, book exchange, reallocation of funds, financial policy, commercial activity and other tasks;
e. creation of a run-time communication environment such as «electronic mail», teleconferences, facsimile and videotex systems for documents' presentation, etc.

To solve these tasks the libraries should, first, buy modern PCs and telecommunication equipment including facsimile and videotex systems; second, they should develop software and hardware support; third, they have to establish a highly effective technology adequate to the vast possibilities of modern hardware and software. However the standard situation shows that the above works go rather slowly which is partially explained by lack of relevant hardware and skilled staff but primarily by a poor long-range planning in the libraries caused by a low level of understanding of the real impact of these tasks.

Thus the above described functional component of the network information technology represents libraries as nodes (1-N) and arcs (a_{ij}), with the latter indicating mostly traditional means of communication such as mail, teletype or messenger service.

The USSR National Public Library for Science and Technology and several other scientific and technical libraries of this country have gained some success in the implementation of the tasks described under the "a" and "b" points. The Library operates the automated system of joint catalogues of domestic and foreign literature. This system functions as the automated databank (ADB) formed on the computers of the first layer. It contains data on the distributed stock of foreign books (some 400,000 records), foreign periodicals (some 28,000 records) and domestic literature of limited circulation (some 80,000 records). The ADB comprises data from the stocks of nearly 1000 libraries. The data is sent to the Library by mail in the paper form (on worksheets) and on magnetic tapes in the ISO transfer format. The Library has recently begun to accept data on the PC diskettes in the CDS/ISIS/M software package format (the whole ADB internal format is CDS/ISIS/VS) and through the companies' local telecommunication channels, for example, through the channels for saling and reserving tickets of the "Sirena 2" Aeroflot company.

As for the point "b" task the Interlibrary Loan users may access the Library's stocks and make requests through telecommunication channels.

The works on the "a" and "b" points have resulted in the transformation of the formal model of the network structure (Fig.2). The new centralized network structure (a hierarchial treelike network) is depicted by Fig.3.

"0" is the main (central) organisation of the system (in our case it is the USSR National Public Library for Science and Technology); 1,2...N are the libraries participating in the ADB with their own local systems of the (i,j) levels; $i=\overline{1,N}$, $j=\overline{1,N}$ U $\overline{1,M}$ U $\overline{1,K}$; they can transfer data directly to the central organisation ("lines and dots" on Fig.3); L_i, $i=\overline{1,N}$ are the independent libraries of the ADB. Two-way arcs indicate the accessibility of the ADB to the resources of the independent libraries.

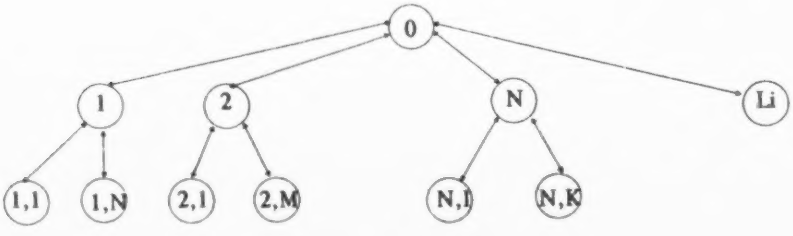

Fig. 3. A Transformed
Network Model

The second functional component of the network information technology is the development of the automated services based on telecommunication access to the libraries' databanks. This component is illustrated by Fig.3. Its main tasks are:

a. to search databases for secondary information (subject, factographic, address and bibliographic). The results of the search may be presented on the screen, downloaded to the diskettes and/or printed;

b. to request primary sources after the preliminary search or without it and receive a facsimile copy (a photocopy as was initially done in the Library) or a primary source itself through the Interlibrary Loan;

c. to download via telecommunication full databases or their parts to electronic media (optical disks including);

d. to provide telecommunication interface to the databases of other libraries and information networks including foreign databases accessed through international cable or satellite communications.

All the above works together with the improvement of telecommunication environment (digital high-speed telephone channels with 64 Kbits/sec or more, fiber- optics communications, radio and satellite communications) involve a simultaneous increase in the databanks capacity including the development of hypertext and fulltext information arrays.

The third functional component of the network technology is the development of the local PC networks and their further integration into the network systems of the above components. On the one hand, the local networks handle the internal automated library technology and form online catalogues, on the other hand, they provide for communication environment for the information interaction of the "system-system" and "user-system" types.

In view of the automation quickly penetrating into the library routines network systems should be mobile, easily switched to the topology and ensure interactive connection between the workstations of various networks.

The USSR National Public Library for Science and Technology uses a local ARCNET/NOVELL network of a two-server structure and a multi-bus topology. Workstations are connected to file servers in accordance with definite functional tasks.

Local network systems as part of the internal library technology have a great impact on the automation of the libraries. Universal by nature they may be used by small libraries as a mighty tool for their automated technologies and by large libraries with databases run on big computers. In this case they may be used not only for network purposes but also as intellectual terminals of big computers in a unified automated technological environment.

4. Development of the Internal Automated Library Technologies

Automation of the internal library technologies has been developing along several lines:

a. formation, support and build-up of the library's online catalogues containing bibliographic and reference data. An online catalogue run on powerful computers with well-developed access systems is formed as a unified automated data structure. It provides for local structures as online catalogues of specialized library's collections.

The Library is developing its catalogue along this line (Fig.1). Minicomputers support the general catalogue of the Library while several workstations of the local network connected to minicomputers reflect the online catalogues of specialized collections and reading rooms: Physics and Mathematics Room, Computers and Information Science Room, Reference and Bibliographic Literature Room and some others. Minicomputers maintain relevant information and technological connection with external ADB (the first layer on Fig.1);

b. automation of stock building processes: selection, order, registration, processing, input of new records into the online catalogue and the ADB, production of catalogue cards (in case of a parallel card catalogue) and formation of topographic catalogues in storage rooms;

c. automation of storage and stock control processes: circulation control, inventory control, stock control and dynamic changes system (withdrawal of the editions that are no longer needed and additional acquisition of the editions that are in high demand);

d. automation of reference and bibliographic services based on the online catalogue, the ADB, local subject-oriented reference databases; automated production of indexes and lists of primary sources;

e. automation of management activity that includes development of policies for the automation of library routines (control over and dispatch of the requests, recommendations on the selection and acquisition of literature, stock building with respect to its quality and sufficient number of copies, improverement of the editions delivery from storage rooms, etc.) and functions of the administrative bodies (manager's workstations, accountant's operations, control of valuables, planning, work with the library's staff and the like;

f. complex automation of user services in the reading rooms, through the Interlibrary Loan channels, by access and order of literature through telecommunication, by subscription to editions, by computer products (magnetic tapes, diskettes, hard copies and others).

Some positive results in the tasks described under the "a", "b" and "d" points have been achieved by the largest libraries of this country — The State Lenin Library, The Library for Natural Sciences of the USSR Academy of Sciences, The Public Library for Science and Technology of the Siberian Section of the USSR Academy of Sciences, The Library of the USSR Academy of Sciences, The State Central Medical Library and others.

The USSR National Public Library for Science and Technology has a well functioning circulation control system based on the local PC network, the automated system for the order of periodicals, the automated system for the dispatch of the International Loan requests, the automated user service rendered in the online and telecommunication modes.

The automation of stock building (point "b") is essential for the efficiency of the library activity as traditional library routines are mostly labor-intensive.

5. New Library Technologies

In this chapter we shall only point out modern information technologies that bode well for the libraries' future. They are:

a. bar codes for the automatic identification of the editions as part of the automated technologies of stock building, stock maintenance, circulation control and registration of users;

b. optical disks, CD-ROM and CD-WROM devices for the online catalogues and user services;

c. local subject and problem-oriented databases on electronic media containing information arrays formed on user requests;

d. facsimile communications for the transfer of primary sources scanned on request;

e. polytext, hypertext, factographic and expert systems based on the information arrays of the libraries' collections and on the additional information from the primary sources;

f. unified automated user services that provide for a highly efficient interactive access to the databases, to the online catalogue and other parts of the automated technologies and cover the whole process of user services from the moment of issuing a user card to the moment of borrowing or returning the edition.

The USSR National Public Library for Science and Technbology has started to implement the technologies named under the "a", "b","c" and "f" points and has come in this work to some positive results.

6. Conclusions

Our survey of the automated technologies in large multi-branch libraries didn't tend to cover all the aspects of this versatile subject.

However we think we managed to trace the main trends in the current library activity. Undoubtedly they require a more scrupulous insight into the software, hardware and technological developments aimed at making the user services more efficient, complete and accurate.

In the long run their quality is a decisive factor for the intellectual potential and prosperity of the society.

Scientific and Technical Libraries of the USSR; Short Survey.

Dr. A.Zemskov
Director USSR National Public Library for Science and Technology

Introduction

Scientific and technical libraries are not only a part of the cultural life but they also are an integer of the national economy. Drawbacks and shortcomings of the Soviet economy, its rapid decline starting from 1989 have drastically affected scientific and trchnical libraries.

Inherent inability of the Soviet industry to accumulate scientific breakthroughs made the Government to develope an eleborate system: from the All-Union Exhibition of Economic Achievements up to the specialized units in enterprises. The nnetwork of special libraries is an essential component of the system. To date the network has stored up an enormous volume of knowledge — and iis now facing a threat of disintegration.

The artificial governmental bodies haven't altered the basic relations between manufacturers and consumers, and thus they haven't influenced the technology advance. Under such conditions administrators were constantly seeking additional forms of solving their problems. Here belong the attempts to develop the special-puurpose plans and integrated programmes. Moreover literature acquisition and readers' service in the scientific and technical libraries were made to adapt themselves to those programmes. Willingness to set up nnew organizations at the Government's expense (without analysing the causes of ineffeciency of the existing ones) resulted in creating numerous iindependent centres dealing with separate kinds of information: translations, authors' abstracts, manufacturers' catalogs, information on the general problems of data transfer, information exchange with the countries of the Eastern Europe, etc. Generally speaking the tendency to strengthen the information network was a characteristic feature of the Government's policy. Naturally the new centres got more attention and more substantial funds whereas the old ones (the libraries first of all) were falling ointo decay and poverty.

The unprotected libraries' system has badly suffered from the insufficiently grounded changed in the national economy in the last years. Introduction of financial self-support and self-administration, nationalization, elimination (liquidation) of ministries, conversion of the military branches of industry into civic ones brought the libraries as well as the whole system into the state of free falling. It's not of course librarians' conservatism that is to blame; the point is that the libraries being nonprofit organizations should get funds from the Governmental (Republican, municipal) buudgets and, in my opinion, cannot function according to the market rules. And in the transitional period when we can offer nothing but knowledge ther situation has grown desperate. Therefore a complete stabilization can be achieved only on the ground of healthy economy.

Let's consider some problems of scientific and technical libraries in this country taking as an example the activities of the USSR National Public Library for Science and Technology (later referred to as «The Library».

The Collections

The main sources of acquiring domestic literature is an obligatory free deposit copy (60,000 – 70,000 items annually, it provides 20 – 40 per cent of the total amount of domestic literature) and a charged obligatory copy. These sources being complemented by purchases in book shops. The subject plan for literature acquisition was coordinated with the plans of other special libraries.

In the last 10 years literature acquisition was steadily decreasing (902,000 items in 1980; 279,000 items in 1990): in particular, declines were caused by alterations in collections' structures (tranferring collections of translations and manufacturers' catalogs to other organizations). One of the major and, in my opinion, long-term trends is the reduction in publishing scientific and technical literature in this country; changes in the national economy have only strenghened this tendency. In addition, a great number of new publishing houses belonging to co-operatives and joint ventures have sprung to life. Those don't follow the instruction on the obligatory deposit copy and for the time being are not eager to supply libraries with their advertizing materials. The Moscow authorities' decision to terminate the financial support of the book shops will resultt in their closing — and the shops for technical literature will be affected in the first place.

Foreign literature acquisition (some 120,000 copies annually) proved to be more steady, deviations during the past 10 years being less than 5 per cent. Purchase of foreign literature through «Mezhdunarodnaia Kniga» agency (50 - 60 per cent of the total foreign literature amount) is a constant problem due to delays in paying invoices. We see the way out in developing direct contacts with vendors and publishers abroad. The existing practice of coordinating by our Library orders of foreign technical literature made by other libraries in the USSR should be altered from obligatory into voluntary; the same approach could be applied to the international book exchange. As compared with 1985 the international book exchange (we have 1,700 agreements) has been reduced by 20 per cent due to the decrease in literature deliveries from the Eastern Europe, Cuba, Mongolia, Vietnam. On the whole it is obviously unnecessary in the free world to differentiate forms of cooperation inside or outside the country.

The Library's collections are being affected by acquisition problems, changes in their composition (withdrawal of some types of technical literature, decay of publications.

Alterations in the Library's Collection in the last 10 years

	1980 millions of items	1990 millions of items
Books	2,5	2,4
Periodicals	2,9	3,8
Microforms	1,1	1,5
Translations, manufacturers' catalogs etc.	3,2	0,6
TOTAL	9,7	8,3

The problems of cataloging (systematization and subject indexing) inlude, as I think, two points: - generation oof the electronic catalogs; the process has been started in the mmajor libraries which work in fact independently. I think that future developments will lead them to some form of unification; - adoption and promotion of a generally accepted interrnational cataloging system; in my opinion, IFLA could be more active in this matter, for example, give moral and financial support to those libraries which share the idea of the unified classification. The faster the libraries of this country make their collections and reference information sources internationally accessible the better.

Preservation of the collections in the scientific and technical libraries has become a matter of primary importance nowadays. The main problem for our Library is the physical loss of the collections. More than 75 per cent of our collections are contained not in the main Library's building but in twenty different locations in Moscow. They are stored in basements and other premises wholly unfit for these purposes. Disasters from fire and/or flooding often occur there. Frequent transportations of literature from storages to the reading rooms (some 1 million items annually) result in damage, deterioration and stealing of publications. The solution of the problem for our Library is to construct a new building capable of housing all the collections.

A more general approach to the preservation problem is to create a specialized lending library. It would be desirable and most helpful to analyze opinions of users and librarians on the problem. At the present IFLA General Conference I'd like to make several practical proposals supplementing the Preservation and Conservation Programme: - world-wide cataloging of rare books; - development of the recommendations on the storage of rare books; - setting up (analogous to IAEA practice) an international ad hoc expert group authorized to check up storage conditions; - setting up an IFLA group — an analog to the rapid deployment unit for urgent international aid to book collections in cases of emergency; development of a rescue (restoration) algorithm.

Dr. V. P. Leonov — President of the Association of Research Libraries and Libraries for Science and Technology of the USSR, Head Librarian of the Academy of Sciences (Leningrad) suggests that exhibitions and displays of rare and precious bokks be organized by joint efforts of several major libraries. They could be similar to the art exhibitions arranged internationally. I wholly support the idea.

It is urgent (high time) to define on the international level the limits of libraries' collections expansion. The problem could be considered as a theoretical, social and cultural one reflecting the ideas of the well-known works «Limits of Growth» by the Rome Club. Now a vast majority of libraries acquire not only printed publications but also diskettes, compact discs, audio and visual records. It's impossible to transfer them into printed forms for depository storing. Besides the life of printed publications is shorter: according to «Library Current» (2) most books out of 50,000 published in the USA annually will be out of use (unreadable) in a hundred years. Therefor I join the opinion that it's essential to preserve the information itself and not the forms of its record. It is a relevant (pressing) problem of the Library science and the general public to find compact and reliable forms of information storage.

The User

In the last three years the attendance of the Library was steadily declining, by 10 – 12 per cent every year. The external causes include: reduction in the amount of scientific and technical literature published, keen interest of the public in political events and preoccupation of people with their own problems. Strict discipline in the newly born enterprises plays the same role: managers are not willing any longer to give the staff the opportunity to visit ther Library during their working hours.

Of our drawbacks we musr point out: incompleteness of the collections, limitations on the number of readers due to lack of space and long waiting for the requested literature. Nevertheless, the Library has 246,000 users. More students have become our readers; the number of others has remained the same.

The intensity of work is high, more than four readers for one seat daily. The amount of publications handed out by one librarian (up to 14,000 annually) is constantly growing and the cost of service is also going up: in 1990 a visit to the Library cost a taxpayer 12,5 roubles (compared to 6,3 roubles in 1984) (3). Having analyzed readers' behaviour and claims the following tendencies can be observed: 1) Increased interest in patents, authors' certificates, foreign manufacturers' catalogs, price lists, norms; 2) Growing interest in literature on economic problems, in particular, in information which could be applied practically — setting up small firms and joint ventures, foreign companies management, etc.; 3) Steady demand for literature on physics and mathematics (turnover (circulation) — 14 with a tendency to still grow up, a special interest is displayed in «Physical Review», «Thin Solid Films», «Journal of Applied Physics», «Journal de Physique», publications on computers (hardware and software) («Byte», «IEEE Transactions», «UKW-Berichte», «Data Pro», «Faulkner»), chemistry («Chemical Abstracts»), reference literature (Turnover (circulation) — 4, «Science Citation Index», «Science Abstracts»), conference proceedings, current periodicals (turnover (circulation) — 2). The figures characterizing the turnover (circulation) of the total collection — 0,79; the main part of it — 1,8; the ratio between domestic and foreign publications borrowed is 42 per cent to 44 per cent; 4) Permanent demand for hard copies of microforms or computer files; 5) Pronounced profit seeking of users; many of them visit the Library not to get primary sources but to obtain documents for further production of secondary information: a private journal, a database, etc. 6) Groups of selfish users who cut out articles and references from books and take cards out of catalogs. Improvement of readers' service by introducing new technologies is being carried out too slowly. We'll mention here several reasons: unreliability of Soviet computers; technological policy which was aimed in the past 15-20 years rather at satisfying needs of administrative organizations (?) and those of the individuals; lack of users' training. In 1990 in our Library there wereonly 43,000 requets (8 per cent of visits) to the computerized system. Readers' requests analysis and the computerized circulation system cover 20 per cent of the borrowed literature.

The common problem of computerization is incompatibility in approaches and hardware applied in different libraries. Considerable financial problems have arisen due to tho decision to make payments in hard currency when buying hardware in the Eastern Europe countries. I feel deep concern about the fact that many libraries neglect their responsibilities of serving disabled people. Although it's a consequence of poverty and not hard-heartedness I'm sure it is intolerable.

The Librarian

In this short survey I'd like to speak about five problems which librarians are now facing: – a threat to existence of some groups of libraries;– urgent need to modernize several major libraries; – computerization of libraries' technologies; – economic activities of the libraries; – social and political activities of librarians.

Alterations brought about in the Governmental bodies and, in particular, elimination of some ministries endanger the very existence of the Central (Departmental) libraries; their unique collections (0,5 – 1 million items each) form together with our Library's collections an integral information resource. Now when the financing of many libraries has been stopped and the rent costs of the premises have been drastically increased these libraries won't be able to function without quick help of the Government. The trade-union libraries have found themselves in the same position. As far as the national problems and separation of the Republics are concerned it can be said to the librarians' credit that there is no disintegration on the national basis.

The working conditions of librarians are characterized mainly by lack of space and hard labour. It stems primarily from the insufficient Governmental support for the libraries. There are also some other reasons: librarians caring more for the libraries' collections have completely sacrificed their own needs. In other words, they let books oust people. So far the new technologies haven't vacated a square metre (by the way, the application of new technologies has not resulted in release of even one librarian. Dr. C. E. Wall quite correctly writes in «Library Hi Tech» (4): «For generations, three critical components — personnel, collections, and facilities — comprised the traditional library. Today, libraries are undergoing a generational shift characterized by the addition of a fourth major component: technology. Library buildings, which previously only needed to house people and materials, now must also accomodate technology.

Our building is 114 years old and desperately needs reconstruction. However the construction of the new Library's building has been going on for more than 20 years and we don't have any hopes for its completion. Though this problem is much the same all over the world: according to the available data presented in the «IFLA Journal» (5) it takes on the average 7,1 years to build a new library (from 1 to 69 years).

The Government constantly falls behind in increasing librarians' wages. In our Library an average salary increased only by half in 1990 as compared to 1988, from 160 to 235 roubles per month. This, of course, doesn't compensate inflation rates and therefore it hasn't influenced favourably the librarians' inferiority complex.

Mention should be made of the fact that libraries now have the right to make some extra money. The main principle of this work is to provide users with additional services beyond the free ones. Although the activity covers only some 10 per cent of the Goverment budget the feeling of freedom and the possibility to pay for the high-quality work are very essential.

The state-of-the-art in computerization of library technologies is marked by a wide application of PCs. Fully accepting the value of the mainframes I strongly believe that PCs fit the libraries better. They are getting cheaper rapidly and thus becoming available for more libraries. PC plays also an important social role as it changes the nature of librarians' labour (and not only of electronic engineers as in the case of mainframes). PC is a good means of raising the cultural level of a librarian increasing his or her personal creativity (check the word!).

Our Library uses computerized technologies in the lending department (100 per cent of requests are processed); the foreign literature acquisition is fully automated; some 20 per cent of the domestic literature acquisition are computerized; there is also a computerized system for the Library management. Efforts are being made to develop desk top publishing, to introduce bar-coding. The main trends in PC applications and creation of local networks are presented in the paper by Dr. Shraiberg — head of the research department on designing and developing computerized systems and networks of the Library (6). The Library's mainframe computers maintain the union catalog database providing telecommunication access to it through the networks of «Aeroflot» - the Soviet airlines agency. They also ensure the work of terminals in reading rooms.

Social and political activities of librarians and their readiness to cooperate beyond the framework of the governmental bodies have resulted in setting up library associations. From those I know I'd like to mention the Moscow Library Association comprising several hundreds of members.

The Association efficiently defends the interests of individual librarians, publishes its own newspaper and has already organized some civil actions (actions of civil disobedience ?). Similar regional associations combined to form the Russian Federation. They have been recognized by the ruling bodies and Ministries of Culture. The Association of Research Libraries and Libraries for Science and Technology of the USSR, the vice-president of which I have the honour to be, has some distinguishing features as well. On behalf of the Association we submitted to the Cabinet our proposals on the possible ways of tackling the problems of: – preservation of collections of scientific and technical libraries; – allocation of funds and premises; – protection of social rights of the librarians.

The Association has discussed the information market problems, coordination of technological policy, development of lists of free services and price lists of charged ones. Our Library has offered its assistance to others in literature acquisition if there are any gaps, in preservation filming.

We should define the Association's attitude towards the networks of information transfer and to the deposit libraries. The problem presents a special interest for us with regards to the collections' composition, technological capabilities and the level of librarians' training. A significant outcome of the cooperation between non-governmental and governmental bodies should be a new Libraries' Law. It must include: opening and closing libraries; libraries' cooperation with the governmental bodies; responsibilities to readers; social protection of librarians. I think it of primary importance to free libraries from any taxes as far as their money making activities are concerned. The same goes for donations to the libraries. It can serve as the basis for their independence.

The literature

1) The Library's Annual Reports, 1980 -1990
2) Library Current, V 3, № 2, 1986
3) Solov'eva D. Ya., report of our libraty, 1990
4) Libraru Hi Tech, V 5, № 4, 1987
5) IFLA Journal, V 16, № 3, 1990
6) Shraiberg Ya. L., report on this Conference

Les activités de la bibliothèque nationale dans la création des repertoires des publications nationales leur rôle dans le développement de la culture

T. Kouznetsova
Chef du département Bibliothèque de la litterature etrangère (VGBIL), Moscou, l'URSS

Les répertoires bibliographiques des publications nationales sont la partie intégrante de la culture nationale. La création offre pourtant de grandes difficultés conditionnées par la nature polysémantique de la bibliographie nationale — phénomène qui est à la base du répertoire.

Ce phénomène était interprété dans les pays différents d'une manière variée. Cela s'explique par les conditions de l'évolution historique des nations et des états, leur culture. Selon ces conditions des idées différentes se sont formées sur l'objet de la bibliographie nationale, sur les principes d'enregistrement des documents dans les répertoires.

Néanmoins le but principal de la bibliographie nationale rétrospective (BNR), et cela est universellement reconnu, est l'enregistrement exhaustif des publications nationales créés dans le passé au cours du développement historique du pays. Ce but détermine des fonctions principales de la BNR:

1) la fonction culturelle et historique qui assure la conservation et l'assimilation de l'héritage culturel de la soiété humaine, l'étude de son évolution historique, de sa contribution à la culture mondiale;

2) la fonction documentaire qui assure la formation de la source documentaire pour les recherches scientifiques dans de branches différentes;

3) la fonction de l'élément de base dans le système de l'information bibliographique.

Le rôle important de la BNR, sa nature fondamentale, explique son actualité, l'interêt permanent pour ses problèmes. La BNR est un des objets de l'étude de l'IFLA. Les programmes de terme moyen de 1981-85 et 1986-90 de l'IFLA furent consacrés à la BNR, son état actuel et tendances du dévelopment.

Les questions de la BNR sont aussi d'actualité en URSS. Elles sont discutées par la presse professionnelle, sur les conférences. Le problème du réportoire du livre russe, un des plus important dans la bibliographie nationale, reste toujours actuel. Dans les républiques les spécialists travaillent sur les répertoires des piblications nationales. Le caractère multinational de notre pays conditionne les tâches spécifiques dans le domaine de la BNR.

La structure du système des bibliographies est très compliquée. Sa création exige l'élaboration des principes méthodiques, téchnologiques et d'organisation très nets. Ces principes, les moyens de résolution des problèmes de la BNR sont considérés dans le "Programme de long terme de la création du système de la bibliographie nationale rétrospective en URSS". Le programme fut élaboré en 1988 dans la Bibliothèque Lénine en collaboration avec d'autres bibliothèques du pays.

Le programme indique deux tâches principales du développement de la BNR. La première tâche — combler les lacunes dans le système et avant tout dans sa partie principale — le répertoire des livres et des périodiques. La seconde — l'enregistrement bibliographique d'autres documents: cartes, musiques, oeuvres des arts plastiques, thèses etc.

Le programme peévoit la création des bibliographies fondamentales où sont enregisrtrées les publications du pays tout entier et des républiques, les ouvres éditées avant la Révolution de 1917 et les publications de l'époque soviétique.

L'enregistrement rétrospectif des publications soviétiques est la fonction des Chambres de livre (Kniznaja palata). En ce qui concerne l'enregistrement des publications d'avant la Révolution, la tâche la plue difficile, c'est la fonction des grandes bibliothèque et en premier lieu des bibliothèques nationales: Bibliothèque Lénine, Bibliothèque publique de Léningrad, bibliothèques nationales des républiques.

La création des bibliographies nationales rétrospectives est une des plus importantes fonctions des bibliothèques nationales ce qui est conditionné par leur stastut et confirmé par l'experience mondiale et les recherches. La bibliothèque nationale est l'unique bibliothèque qui possède tous les documents imprimés et des manuscripts de différentes époques et de domaines variés. Ses collections sont caractérisées par l'universalité et l'exhaustivité. Les documents concervés sont de type, de genre et de langue différents.

Donc la bibliothèque nationale possède toutes les conditions pour créer les répertoires des publications nationales.

Pourtant la bibliothèque nationale ne pourrait pas seule accomplir une tâche si considérable. Le travail sur les répertoires des publications nationales exige la coopération des efforts de plusieurs bibliothéques et d'autres institutions. Dans ces conditions la bibliothèque nationale devient le centre qui coordonne leurs activités et élabore des principes méthodiques et scientifiques.

En URSS tel centre est la Bibliothèque Lénine. En tant que centre elle accomplit l'ensemble des fonctions. Elle a élaboré la conception de la BNR et les documents qui tracent les directions principales de son développement. Le document principal est "Le programme de long terme..." déjà mentionné. La Bibliothèque Lénine a participé aux recherches internationales sur la BNR réalisées par le groupe de travail de l'IFLA. Au carde de ses recherches la Bibliothèque a édité la bibliographie et la liste cumulative des BNR des pays du monde. Ces éditions peuvent être considérées comme la contribution à la création de la base de ces recherches.

La Bibliothèques Lénine en tant que grand centre bibliographique du pays produit elle-même les répertoires des publications nationales. Parfois elle est initiatrice de la production des bibliographies fondamentales. Le rôle particulier parmi ces éditions appartient aux catalogues collectifs qui sont considérés comme la forme optimum de la BNR en URSS où les publications sont déconcentrées dans plusieures institutions.

Le rôle des catalogues collectifs est très important dans la création du répertoire du livre russe. Les premiers pas dans ce domaine étaient fait aux années 50 quand la Bibliothèque publique à Léningrad et la Bibliothèque de l'Académie de sciences ont publié les catalogues collectifs des livres édités en caractéres cyrilliques (1689-1725) et des livres en caractères civils (1708-1725). Ces catalogues ont le titre commun "La description des livres édités sous Pierre I".

Le travail fut continué par la Bibliothèque Lénine. Elle a proposé de créer le catalogues collectif du livre russe du XVIII siècle. Ce catalogue fut publié par quelques bibliothèques scientifiques.

Le travail du catalogage du livre russe se continue actuellement. La Bibliothèques Lénine, la Bibliothèque publique, la Biblioteque de l'Académie des sciences et la Bibliothèque historique travaillent aujourd'hui sur le collectif des livres des années 1801-1825.

Ces oeuvres contribuent considérablement à la création du répertoire du livre russe. Selon leur forme ce sont des catalogues mais d'après leur contenue et méthodes du travail (l'analyse du livre, l'utilisation de plusieurs sources bibliographiques et de référence) elles se rapprochent au maximum du répertoire. La conception du livre comme monument de la culture national qui est propre à ces éditions augmente considérablement leur valeur historique et scientifique.

Cette conception du livre caractérise aussi d'autres bibliographies qui complètent et enrichient le répertoire. Les plus importantes parmi elles: «Catalogue collectif de la littérature clandestine du XIX siècle», bibliographie «Histoire de la Russie d'avant la Révolution dans les mémoires», des catalogues imprimés des fonds de grandes bibliothèques.

La Bibliothèque Lènine, d'autres bibliothèques du pays doivent résoudre le problème de la création de la bibliographie exhaustive du livre russe de toute la période de son existence. Cela prévoit en premier lieu l'enregistrement du livre russe du XIX — début du XX siècle (1826-1917). Cette partie du répertoire est très compliquée du point de vue méthodique. La résolution de ce problème est la création du catalogue collectif du livre de cette période. Six grandes bibliothèques qui possèdent tel livre travaillent actuellement sur ce catalogue. Ce sont Bibliothéque Lénine, Bibliothèque publique, Bibliothèque de l'Académie des sciences, Bibliothèque historique, les bibliothèques des Universités de Moscou et de Léningrad.

La base du travail est le fichier des livres russes du XIX — début du XX siècle. Le fichier se trouve dans la Bibliothèque Lénine (plus de 600 000 cartes). Les bibliothèques-participantes comparent ce fichier avec leurs catalogues, en les précisant et complétant. On fait la rédaction des entrées bibliographiques, leur unification. Ces processus vu le volume colossal du catalogue exigent des efforts considérables, des grands moyens et du temps. Pourtant ces efforts sont justifiés car ce catalogue est de grand valeur pour la culture russe nationale.

En ce qui concerne le répertoire de la presse russe on a beaucoup travaillé sur lui encore en Russie d'avant la Révolution de 1917. Cela s'explique par le rôle particulier du journalisme en Russie, son influence sur les mouvements sociaux, science et culture. La création du répertoire des périodiques fut justement considérée par les spécialistes comme la tâche principale de la bibliographie nationale. Les bibliographes soviétiques qui travaillent aujourd'hui dans ce domaine s'appuient sur les traditions solides jetées par les bibliographes russes A.N.Néoustrojév, N.M.Lissovskij et d'autres dans leures ouvres fondamentales.

Grâce à eux nous avons maintenant une série des bibliographies où sont enregistrées les périodiques russes depuis le premier journal (1703) jusqù'aux bibliographies des périodiques éditées en URSS publiées par Knijnaja palata («Létopis»)

L'enregistrement rétrospectif des périodiques nationales se réalise dans les bibliographies, catalogues collectifs, catalogues imprimés des collections des bibliothèques.

La Bibliothèque publique à Léningrad a édité «La bibliographie des périodiques de la Russie, 1901-1916» qui a continué chronologiquement une ouvre fondamentale de N.M.Lissovskij «La presse russe. 1703-1900». La bibliographie se compose de 4 volumes où sont enregistrées 10 mille publications.

La plus importante bibliographie des périodiques soviétiques est «La presse de l'URSS, 1917-1949» faite par Knijnaja palata. Cette bibliographie comprend revues, bulletins, d'autres types des périodiques (sauf les journaux) sur toutes les langues des peuples de l'URSS.

Les journaux sont enregistrés dans la bibliographie «Les journaux de l'URSS. 1917-1960» créée par Knijnaja palata, Bibliothèque Lénine, Bibliothèque publique de Léningrad. Cette ouvre a une grand valeur scientifique et de réference.

Parmi les différentes éditions bibliographiques de la Bibliothèque nationale il faut mentionner les catalogues imprimés de ses collections: livre ancien, périodiques, cartes, notes et d'autres documents. Ces catalogues contiennent les grands massifs de documents concentrés durant la longue période dans les grandes bibliothèques ce que permet de les considérer comme les parties integrantes du répertoire. Les catalogues les plus importants de la Bibliothèque Lénine sont: «Les publications nationales du XVIII siècle», «Les journaux russes dans le fond de la Bibliothèque Lénine, 1702-1916», «Les notes russes dans le fond de la Bibliothèque Lénine»; de la Bibliothèque publique de Léningrad sont: «Le catalogue du livre russe publié en cyrillique dans les imprimeries petersbourgiennes du XVIII siècle, 1715-1800», les catalogues des atlas russes des XVIII et XIX siècles, «La musique russe de la première moitié du XIX siècle au fond de la Bibliothèque publique Saltykov-Schedrine», d'autres.

Outre les bibliothèques — centres de tout le pays les bibliothèques nationales des républiques de l'URSS travaillent beaucoup sur leurs répertoires. Comme centres de coordination dans les républiques elles organisent ces activités et élaborent les principes méthodiques du catalogage des publications nationales. Comme grandes bibliothèques scientifiques qui gardent le bien national elles créent elles-même avec d'autres bibliothèques républicaines les bibliographies fondamentales rétrospectives. On peut citer les bibliographies importantes des dérnières années: Le catalogue collectif «Le livre de Biélorussie, 1517-1917», «La bibliogtaphie de la Lituanie, 1863-1904», «Les livres kazakh (1807-1917)».

Un des problèmes des bibliothèques nationales des républiques est l'enregistrement rétrospectif des publications éditées en dehors des frontières de la république mais qui la concernent du point de vue de leur contenue, leurs auteurs ou leur langue. En concentrant et enregistrant telles publications la Bibliothèque nationale crée encore une partie du répetoire.

Donc les activités dans le domaine du répertoire des publications nationales sont la fonction imprescriptible de la Bibliothèque nationale. Cela est conditionné par leurs statut, traits typologiques, riches ressources documentaires qui contiennent tous les aspects de la science et reflètent l'évolution culturelle de la société.

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Conceptual Foundations of National Bibliography

Alexey L.Muratov
Deputy Director,

and

Boris A.Semenovker,
Leading Researcher,

Department of National Bibliography, All-Union Book Chamber, Moscow, USSR

ABSTRACT

To achieve UBCIM aims effectively it is necessary to guarantee not only the creation of national bibliographic records but their modern tecnology — based use as well. With this aim in view it is proposed: (1) to revise the UBCIM Programme, (2) to work out a standard of tecnological and information level for national bibliographical services, (3) to set up a consultative body and fund for helping national bibliographical services to achieve the standard level, (4) to develop a procedure for the preferential use of outcoming information by the sponsors of the fund.

Conceptual foundations of national bibliography

A conceptual model of national bibliography is needed to define the optimal ways of development which would be up-to-date from the the technological and information point of view. The model on Soviet experience, but it may also be useful for the international community and countries of various technological development levels. As nation bibliographical information belongs to the world culture as a whole, the UBCIM objective should be more versatile than it has been defined up to now. Incentives and standards should be worked out regulating not only the creation of bibliographical records by national bibliographical services, but the optimal conditions of their use as well.

In this respect the Soviet experience is in a sense unique. The USSR national bibliography combines a high information level and underdeveloped technology. In our country the official national bibliography is more than one and a half century old (founded in 1837). Its development has been marked by the close attention given to it both by the government and the society as a whole. As a result we have an information system based on special bibliographical institutions-book chambers (All-union and republican). Their main specific features are as follows:

- — covering of all kinds and composite parts of publications and as a result production of a great volume of bibliographical records,
- — maximum-information level of bibliographical records with aim of satisfying all possible information needs,
- — UBC-based standardization of bibliographed description (ISBDs),
- — high quality of bibliographical records recognized by the users,
- — well developed technological process based on a variety of special documentation,
- — interaction of book chambers, libraries and other users.

Thus from the information point of view (volum and quality) the USSR national bibliography conforms to the UBC principles as they are defined now and keeps in line with the world information level. Yet due to the technological underdevelopment of the counry as a whole the technological base of the national bibliography lags behind the world level. At present the USSR national bibliography produces mostly bibliographical indexes and printed cards, i.e. paper products. As to the machine-readable information the situation differs in the domestic and international markets. Inside the country the All-Union Book Chamber is technologically able to provide all possible users with machine-readable information. The problem is that the majority of them do not possess the necessary hardware. Further advancement in the international market is impeded by the back of copyright and exchange agreements and by the fact that the UNIMARC format has been fully implemented. These factors harm user interests both inside and outside the country. Especially as there is a considerable interest i the information from the USSR.

The conceptual foundations of national bibliography were developed to suit this purpose. The model was to provide a complete description of modern national bibliography. This would allow to define and ways to reach them. The concept includes the following sections:

— informatization as the technological basis of national bibliography,
— definition of state (UBCIM) and national bibliography as separate notions,
— needs and users,
— organization,
— creation and distribution of bibliographical information,
— economic problems,
— personnel,
— research.

Informatization. Three importants factors may influence technological level of modern national bibliography:

— primary importance of machine-readable data,
— dependence on the technological development of the country as a whole,
— provision of the national bibliographical service with the necessary hadrware and software.

Even if users are bellow the world technological level the national bibliographical service should not be so. If the service is bellow the world level users will not be able to get the necessary information. They will be obliged to turn to different sources, even outside the country. This may be a threat to the very existence of the national bibliographical service and to the cultural independence of the country, to say nothing of the UBCIM principles.

As to the question of underdependence of national and international bibliographical communities one should think of giving rather than taking. On the other hand, the international community, IFLA included, would do well to work out a procedure of level evaluation of national bibliographical services to help item to reach the world level.

"State" ("UBCIM") and "national" bibliography. It is wellknown that a clear definition of these notions (a thorny problem in the theory of bibliography) is absolutely necessary to know what documents may be included in the bibliographical processing (their classification see Table 1 in the Annex). The classification allows a multiple definition of documents and authors to be included in the national data-base as well as their optimal minimum. For state bibliography it is documents issued in the territory occupied by the state. That corresponds exactly to the UBCIM principles. Therefore this variety of bibliography may be rightly called "UBCIM bibliography". For national bibliography it is documents issued in the national language that are the main object.

Needs and users. The classification of needs in national bibliographical records presented in Table 2 (See the Annex) provides means of describing national bibliography products by evaluating the needs that may be satisfied. As to the users it is necessary to take into consideration the following factors:

— priority of users,
— users should take part in decision making,
— ability of users to develop technologically should be taken into consideration,
— national bibliography remains an integral part of librarianship although it may be independent as an institution.

Organization of national bibliographical service may be multiple. That has been explicitly proved by modern developments. One form of organization is not enough to ensure high quality and quick distribution of information. In the USSR national bibliography is organized on the federal and administrative principles. The system has some advantages but it is not all that is necessary to reach a modern technological level. The research proves that there are more than one form of organization:

— federal and administrative structure based on the state system,
— shared cataloguing based on regional legal deposit rules (e.g. interaction of National and provincial libraries in France),
— shared cataloguing based on different specialized interests (e.g. the National Coordinated Cataloging Program in the USA),
— association of several national bibliographical services of the country (publications, theses, films, audio materials etc.),
— involving private firms,
— world system of national bibliographical services,
— taking part in international activities (UNESCO, IFLA, ISO etc.) which provides opportunities for technologically developed countries to secure their achievements as international standards and for the less developed countries to be in contact with developed countries and receive their help in order to achieve the standard level.

Creation and distribution of bibliographical resords is based on the legal deposit laws. Yet in free society it is not only the law that should be the only basis of national bibliography. It should also lean on the interest of publishers and authors to defend their copyright. This problem is of special interest for the USSR. Our system of legal deposit was entrenched in the rigid administrative system. At present it has become less reliable du to new developments in publishing.

National bibliography products are twofold: authority data and bibliographical records. It is known that the development of authority data as an independent product is due to computerization. The fact that the USSR national bibliography does not produce authority data may be considered an anachronism.

Problems of inclusion of documents, quality and time of distribution of bibliographical records are traditional for national bibliography. It is now quite clear that they can be solwed only if national bibliographical services and their users are totally computerized.

Research is absolutely necessary for the development of national bibliographical services (short- and long-term projects).

The research is carried out both by national bibliographical services and international organizations. The activities of the IFLA in this field are well known.

What is there to offer for solving the problems described above?

1. It is necessary to revise the UBCIM Programme in view of securing not only the creation but also the international use of information produced by national bibliographical services.
2. To work out a standard of technological and infomation level for national bibliographical services.
3. To set up a consultative body and fund for helping national bibliographical services to achieve the standard level. The would-be users of bibliographical information as well as producers of information technology may act consultants and sponsors of the fund.
4. To develop a procedure for the preferential use of outcoming information by the sponsors of the fund.

Table 1. Documents and authors in state (UBCIM) and national bibliography

	State (UBCIM)		Nation (ethnos)	
	Documents	Authors	Documents	Authors
Territory				
Territory occupied by the state or the nation	Documents issued in the terriroty occupied by the state	Authors living in the territory occupied by the state	Documents issued in the territory occupied by the nation	Authors living in the territory occupied by the nation
	Documents created by the authors born in the territory occupied by the state (irrespective of where they reside)	Authors born in the territory occupied by the state (irrespective of where they reside)	Documents created by the authors born in the territory occupied by the nation (irrespective of where they reside)	Authors born in the territory occupied by the nation (irrespective of where they reside)
Other territories	Documents issued for the state outside its territory	Authors of the documents issued for the state outside its territory	Documents issued for the nation outside the territory it occupies	Authors of the documents issued for the nation outside the territory it occupies
Language				
Official or national language	Documents issued in the official language	Authors writing in the official language	Documents issued in the national language	Authors writing in the national language

	State (UBCIM)		Nation (ethnos)	
	Documents	Authors	Documents	Authors
Other languages	Documents in other languages which are translations or expositions of documents in the official language (irrespective of where they were published)	Translators and authors of expositions of documents in the official language (irrespective of where they reside)	Documents in other languages which are translations or expositions of documents in the national language (irrespective of where they were published)	Translators and authors of expositions of documents in the national language (irrespective of where they reside)
Citizenship and nationality	Documents created by citizens of the state (irrespective of where they were born or reside)	Authors who are citizens of the state (irrespective of where they were born or reside)	Documents created by nationals (persons belonging to the nation) (irrespective of where they were born or reside)	Authors belonging to the nation (irrespective of where they were born or reside)
Regional bibliography	Documents about the state (irrespective of where they were published)	Authors of documents about the state (irrespective of where they were born, reside or of their citizenship)	Documents about the nation (irrespective of where they were published)	Authors of documents about the nation (irrespective of their nationality)

Table 2. Needs in national bibliographical information (NBI)

Class numbers	Classes of needs
1.	Needs in national bibliography products
	1.1. Data bases (complete, fragments)
	1.2. Bibliographic indexes
	1.3. Printed cards
	1.4. Records (record elements) by request
2.	Needs in information on various carriers and by communication
	2.1. Paper
	2.2. Magnetic tape
	2.3. CD-ROM
	2.4. Microfilm
	2.5. Microfiche
	2.6. Any other carriers
	2.7. Any means of communication (displays, telegraph, telephone, TV, satellite etc.)
3.	Needs in information about types of documents (publications) and composite parts
	3.1. Types of publications and other documents
	3.1.1. Monographs
	3.1.2. Abstracts of theses
	3.1.3. Serials
	3.1.3.1. Newspapers
	3.1.3.2. Periodicals, bulletins, collections of papers
	3.1.4. Printed music
	3.1.5. Graphic publications
	3.1.6. Maps
	3.2. Types of composite parts
	3.2.1. Periodical articles
	3.2.2. Newspaper articles
	3.2.3. Reviews

Table 2 (cont.)

Class numbers	Classes of needs
4.	Needs in information of various time limits
	4.1. Current
	4.2. Perspective
	4.3. Cumulative
	4.4. Retrospective
5.	Needs in information in various languages
	5.1. Information in the original language of the document
	5.2. Information in various international languages (list of languages)
6.	Needs in information in various alphabets and other characters
	6.1. Alphabet or character sets of the original language of the document
	6.2. Transliteration (list of alphabets used for transliteration)
	6.3. Transcription (list of transcription systems)
7.	Needs in regional information (list of geographical and administrative units)
8.	Needs in information about the contents of documents
	8.1. Classification scheme accepted by the national bibliographical service (list of headings)
	8.2. Other classification schemes (lists of headings)
	8.3. Subject classification accepted by the national bibliographical service (list of subject headings)
	8.4. Other subject classifications (lists of subject headings, descriptors etc.)

Table 2 (cont.)

Class numbers	Classes of needs
9.	Accessibility of documents and information about them
	9.1. Unlimited accessibility
	9.2. Limited accessibility (list of limitations)
10.	Needs in information about documents by the wish of the user
	10.1. All documents processed by the national bibliographical service
	10.2. Document by type or class needed by the user (list of types and classes)
11.	Needs in the definite number of records
	11.1. All records produced by the national bibliographical service
	11.2. Limited number of records (list of limitations or requests)
12.	Needs in the definite number of record elements
	12.1. All record elements produced by the national bibliographical service
	12.2. Limited number of record elements (list of required record elements)
13.	Needs in records requested by definite record elements (list of the required data elements)
14.	Needs in authority records
	14.1. Kinds of authority records
	14.1.1. Personal names
	14.1.2. Corporate names
	14.1.3. Uniform titles
	14.1.4. Topical terms
	q4.1.5. Serial titles
	14.1.6. Geographical names
	14.1.7. Names of publishers
	14.2. Data elements of each kind of authority records

Table 2 (cont.)

Class numbers	Classes of needs
15.	Needs in regional information (list of countries and localities)
16.	Need in the definite format of information products (list of computer formats and formats of publications)
17.	Needs in booktrade information (list of publishers and booksellers)